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# NAVAL POSTGRADUATE SCHOOL

## Monterey , California



# THESIS

P11623

THE OFFICER BILLET COST MODEL

by

Cynthia A. Padgett

March 1988

Co-Advisor  
Co-Advisor

Kenneth J. Euske  
Danny G. Matthews

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The Officer Billet Cost Model

by

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Lieutenant, United States Navy  
B.A., Michigan State University, 1979

Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

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March 1988

## ABSTRACT

The purpose of this thesis is to present a military manpower costing model which is appropriation oriented to be used for budget planning purposes. The purpose of the model is to arrive at a more refined cost estimate for individual officers or groups of officers based on their area of specialization and qualifications. This model is intended for use by program sponsors in the planning and budgeting of billets for their programs and personnel for the billets. The Officer Billet Cost Model is constructed showing variation in officer costs by paygrade. Pay components of the Military Personnel, Navy (MPN) account that could not be assigned to individual groups of officers were incorporated in a basic cost model. Pay components of the MPN account that could be assigned by designator were incorporated into individual submodels.

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## **I. INTRODUCTION**

### **A. GENERAL**

Numerous attempts have been made at producing some form of a military manpower/personnel costing model over the years. Essentially these models fall into two broad categories, billet costing models and appropriation oriented models. Billet costing models are loosely defined as those models designed to reflect those personnel costs that must be incurred to fill and maintain each identifiable job in the various armed forces. Appropriation oriented cost models are defined as those models used for budget planning purposes. The models are significantly different in that billet costing models take into account training costs and nonproductive time in addition to those costs used for budget planning purposes.

Annually, the Department of Defense (DOD) requests specific levels of funding from Congress for military personnel costs. The Navy's congressional appropriation for personnel costs, less reserve personnel costs, is classified Military Personnel, Navy (MPN). The MPN appropriation budget is the primary financial plan developed to support the active component manning of the force structure.

### **B. BACKGROUND**

Program sponsors submit their billet/personnel requirements based on annual planning figures developed by OP-80. An average cost figure is currently used for funding both officer and enlisted billets by resource sponsors. These figures are developed as follows: NMPC-7 budgets/projects the officer personnel funding requirements for the current fiscal year and the three outyears based on current/projected end strength requirements; NMPC-16 develops average workyear statistics and provides end strength statistics for officers based on Congressional mandates; OP-80 uses these figures to arrive at an average rate per officer which is used for budget planning purposes and also by resource sponsors to buy billets for their programs and personnel for the billets.

Because of the average cost figure currently utilized, sponsors do not experience the real costs of the personnel they buy. Personnel dollars allocated to programs do not reflect the real/true cost of the personnel required for the programs. For instance, each sponsor buys a portion of total Aviation Career Incentive Pay (ACIP), Submarine



Duty Pay, and Sea Pay; an O-10 costs the same as an O-1; and a medical doctor the same as a chaplain.

The following quote summarizes the need for this thesis.

If program sponsors paid for the specific skills required for their platforms, there would be positive incentives to reduce demand for skill levels and to eliminate high skill and personnel intensive platforms. [Ref. 2: p. 39]

Program sponsors would be incentivized to get more "bang for their bucks".

### **C. OBJECTIVE**

The objective of this research effort is to construct a manpower costing model and submodels for Naval officers which more accurately reflects the costs incurred by the Navy to recruit and retain these individuals. The purpose of these models is to arrive at more refined cost estimates for individual officers or groups of officers based on their area of specialization and qualifications. These models are intended for use by program sponsors in the planning and budgeting of billets for their programs and personnel for the billets.

### **D. THE RESEARCH QUESTION**

The Officer Billet Cost Model is designed to address the question, "Can manpower dollars be allocated in such a way as to more accurately reflect the cost of quality and special skills required of officers for all individual billets in each of the Navy's programs?"

### **E. SCOPE, LIMITATIONS, AND ASSUMPTIONS**

The main thrust of this research is to develop a basic Officer Billet Cost Model (OBCM) and twenty-four submodels which program sponsors could use to "buy" the officer personnel required to fill the billets for their various programs. This thesis addresses only the costing of officer personnel. The costs of personnel that are considered are the twelve pay components of the Military Personnel, Navy (MPN) account for officers which include: Basic Pay, Retired Pay Accrual, Social Security Tax - Employer's Contribution, Basic Allowance for Quarters, Variable Housing Allowance, Basic Allowance for Subsistence, Station Allowances - Overseas, Uniform Allowances, Family Separation Allowance, Separation Payments, Incentive Pays for Hazardous Duty, Special Pays, plus two additional compensation components Permanent Change of Station Travel and Other Indirect Costs which includes Death Gratuities, Survivor's

Benefits, and Educational Benefits. Incentive Pays for Hazardous Duty include Flying Duty, Submarine Duty, Parachute Jumping, Experimental (see Appendix B), Demolition Duty, Flight Deck Duty, and Toxic Material Pay. Special Pays include Physicians' Pay, Dentists' Pay, Optometrists' Pay, Personal Money Allowance, Responsibility Pay, Diving Duty Pay, Nuclear Officer Incentive Pay, Sea Pay, Imminent Danger Pay, and Foreign Language Proficiency Pay.

The MPN components are applied by paygrade in the basic OBCM, a general model, using various assumptions as described. Twenty-four submodels are constructed for those individual elements of incentive pays for hazardous duty and special pays which can be specifically identified as applying to specific designators. The twenty-four submodels are developed reflecting paygrade and designator variations.

The assumptions applied in constructing the OBCM are conservative in nature using a minimum promotion flow assumption, the minimum number of years per paygrade, when constructing specific rates (i. e., Submarine Duty Pay, Aviation Career Incentive Pay, Variable Pay for Physicians). The whole model can be further refined and exact costs per designator identified in some instances, however the dollar amounts involved are not material in amount. The greater accuracy that could be attained by allocating these amounts would introduce unnecessary complexity and not enhance the usefulness of the model.

This model does not consider such factors as training and nonproductive time and is not for use in man-machine tradeoffs in weapon systems or equipment. The proposed model also excludes those reserve officers on active duty in connection with the recruiting, training, and administration of the reserve components.

## **F. LITERATURE REVIEW AND METHODOLOGY**

The methodology by which the research data were collected consists of literature searches, official data collection, and interviews.

Literature searches produced no other literature pertinent to this model development other than that provided by Navy sources. Documents including Department of the Navy (DON) instructions, reports, and memoranda were obtained from various official sources. Pay data on Navy personnel and DON annual budget submissions to Congress were obtained from Navy Military Personnel Command (NMPC), Code 7 staff, the central manager of personnel funding. Officer personnel statistics were obtained from NMPC, Code 16. These documents provided insight into

how the average cost figures are currently developed, and provide the data and background information necessary in developing the basic OBCM and twenty-four submodels proposed by this thesis.

Interviews were conducted with various personnel working in the Offices of the Chief of Naval Operations, Navy Military Personnel Command, and the Personnel Support Activity Disbursing Office at the Naval Postgraduate School, Monterey, CA. These interviews were conducted to gain insight into the current billet costing method and to clarify and expand knowledge of how Navy officers are paid. Additionally, both the Department of the Army and Department of the Air Force budgeting personnel were interviewed to learn how they cost personnel for budgeting purposes and slotting billets. Methods currently in use parallel that of the Navy and did not provide additional information for use in development of the OBCM.

## **G. THESIS ORGANIZATION**

This thesis is divided into three chapters and three supporting appendices. In Chapter I a general discussion and the background of costing models are presented, followed by a discussion of the objective of the thesis, the research question, the scope, limitations, and general assumptions made, literature review, methodology, and thesis organization.

Chapter II discusses the construction of the OBCM. First, it provides a description of the components of the basic OBCM followed by a discussion on how each component of the basic OBCM is formulated including the underlying assumptions used in each application. Secondly, it provides a discussion of the twenty-four individual submodels including descriptions of the elements of the components which are individually applied in developing the submodels. This is followed by a discussion of how each element is applied to the specific submodel including the underlying assumptions used in each application.

Chapter III provides the conclusions and recommendations of this study, including a summary of the study. Conclusions are drawn from the model and recommendations are made regarding both implementation and future use of the OBCM. Finally, recommendations are made for additional theses in this area of study.

Appendix A provides the equations by paygrade for the construction of the basic OBCM. This is followed by the equations by paygrade and designator for the construction of the Aviation Warfare Submodels, the Submarine Warfare Submodels, the Special Warfare/Operation Submodels, the Medical Corps Submodel, the Dental

Corps Submodel, the Medical Service Corps Submodel, and the Surface Warfare Submodels.

Appendix B provides a list of abbreviations and acronyms used in constructing the basic OBCM and the twenty-four submodels and their definitions.

Finally, Appendix C provides a definition and source of dollar amounts used for each equation element in the basic OBCM and the twenty-four submodels.



## II. OFFICER BILLET COST MODEL

### A. GENERAL

The purpose of this chapter is to present the construction of the Officer Billet Cost Model (OBCM), discuss each component of the model and the underlying assumptions used in determining each component. Fiscal year 1986 cost data were used in the construction of the OBCM since they are the most current data available. Naval Military Personnel Command (NMPC) source data [Ref. 1: p. 21-38 & 81-99] were used for calculating and applying each cost element of the model. Likewise, statistical data used in calculating and applying officer workyears experienced, by designator, were obtained from NMPC. [Refs. 1,3,4,5.]

Specifically, the OBCM is designed to address the question, "Can manpower dollars be allocated in such a way as to more accurately reflect the cost of quality and special skills required of officers for all individual billets in each of the Navy's programs?"

The current method of manpower costing employs two average cost figures, one for officer personnel and one for enlisted personnel. Total manpower funding requirements are computed for officer and enlisted personnel separately. This thesis addresses only the costing of officer personnel. Total budgeted manpower dollars for officer personnel are divided by the total number of workyears experienced by the officer corps to arrive at an average cost figure per officer workyear. The average cost figure is used by program sponsors to budget billets for programs as well as personnel to fill the billets. The disadvantage of employing the average cost figure is that it does not reflect an accurate cost for any one individual. The cost to employ an Admiral is exactly the same as the cost to employ an Ensign. Likewise, the cost of a nuclear submariner or medical doctor is the same as a chaplain or lawyer.

The proposed OBCM results in more refined cost estimates. Discrete figures are developed for each paygrade W-2 through W-4, and O-1 through O-7. Paygrades O-8 through O-10 are consolidated since the differences in pays and allowances at this level vary by a minimal amount. Each of the twelve pay components of the Military Personnel, Navy (MPN) appropriation is considered separately in the proposed model, additionally, permanent change of station travel and other indirect costs are included,

with specific assumptions governing their distribution. Concurrently, officer personnel are categorized according to their designators, each of the designators being considered individually when applying a component from the MPN account. The basic model is developed to apply across all designators. [Ref. 6] Special pays and incentive pays for hazardous duty were applied individually to each warfare category and other designators resulting in 24 separate submodels being developed.

The proposed model and submodels excludes those reserve officers on active duty in connection with the recruiting, training, and administration of the reserve components.

## **B. COMPONENTS OF THE OFFICER BILLET COST MODEL**

The 17 components/elements of the MPN account that are contained in the OBCM follow:

### **1. Basic Pay**

Basic pay is the primary means for compensating military personnel for services rendered. Basic pay rates for an individual are based on paygrade and length of service. [Ref. 7: p. 21]

### **2. Retired Pay Accrual**

Retired pay accrual provides for the Navy's portion of the Department of Defense' (DOD) contribution to the military retirement fund. Prior to fiscal year 85 retirement funding was appropriated from year to year as needed. Accrual of the retired pay liability to recognize future payments to retired members is required by 10 U.S.C. 1466. [Ref. 1: p. 22]

### **3. Social Security Tax**

This component of the MPN account is the Navy's portion of DOD's contribution, as an employer, as required by the Federal Insurance Contribution Act. [Ref. 1: p. 40]

### **4. Basic Allowance for Quarters**

Basic Allowance for Quarters (BAQ) is the cash allowance provided to military members when adequate government quarters are not available. This basic allowance is intended to cover the cost of alternative housing for the member including the cost of utilities. BAQ entitlement is based on paygrade and dependency status. [Ref. 7: p. 23]



## **5. Variable Housing Allowance**

The Variable Housing Allowance (VHA) is designed to cover those housing costs not covered by BAQ due to being located in high cost areas. VHA entitlement is determined by paygrade and location. [Ref. 7: p. 23]

## **6. Basic Allowance for Subsistence**

This cash allowance is a partial reimbursement to every officer to help defray their cost of subsistence. This allowance is not intended to cover the members full cost of subsistence and is a flat rate dependent on no other criteria. [Ref. 7: p. 24]

## **7. Station Allowances, Overseas**

This allowance includes per diem to officers on duty outside the United States, to provide for increased cost of living expenses, housing, and temporary lodging for themselves and their dependents. [Ref. 1: p. 34]

## **8. Uniform Allowance**

Uniform allowances provide for payment of an initial clothing allowance to officers upon commissioning, and an active duty clothing allowance to reserves upon entry or reentry to active duty for a period of 90 days or more. [Ref. 1: p. 35]

## **9. Family Separation Allowance**

The family separation allowance is compensation to members with dependents for additional separation expenses when one of the following requirements are met: a) the movement of dependents to an overseas permanent duty station is not authorized and the member must maintain two homes, b) the movement of dependents to the permanent duty station or a place near the station is not authorized at government expense under the joint travel regulations and the member's dependents do not reside at or near that station, c) the member is on duty on board a ship away from the home port of the ship for a continuous period of more than 30 days, or d) the member is on temporary duty or temporary additional duty away from that individual's permanent station for a continuous period of more than 30 days and the member's dependents do not reside at or near the member's temporary or temporary additional duty station. [Ref. 1: p. 36]

## **10. Separation Payments**

Separation payments provide: a) lump sum terminal leave payments for unused accrued leave at time of discharge, or death, b) lump sum payment to reservists who are involuntarily released from active duty after having completed at least five years of active duty, c) severance pay for failure of promotion or for reasons other than

physical disability, and d) severance pay for disabled members on active duty and on the temporary disability retired list who are separated for physical reasons. [Ref. 1: p. 38]

**11. Experimental Pay**

This hazardous duty pay is paid for duty inside a high or low pressure chamber, and duty involving acceleration or deceleration experiments, or thermal stress experiments. Volunteers for these types of duty are selected from those who meet qualification criteria. [Ref. 1: p. 23]

**12. Toxic Material Pay**

This hazardous duty pay is paid for duty involving exposure to highly toxic fuels, pesticides or laboratory work that utilizes live, dangerous viruses or bacteria. [Ref. 1: p. 23]

**13. Personal Money Allowance**

This allowance is paid to flag officers on active duty who are serving as Chairman Joint Chiefs of Staff, Chief of Naval Operations, Admiral, Vice Admirals, and senior members of the Military Staff Committee of the United Nations. Included in this component are special allowances which are paid to officers on active duty serving as Commandant of Midshipmen, U. S. Naval Academy; Superintendent, Naval Postgraduate School; President, Naval War College; Superintendent, U. S. Naval Academy, and Director of Naval Intelligence. [Ref. 1: p. 26]

**14. Imminent Danger Pay**

Entitlement to this pay must be approved at the Congressional level. It is paid to officers on active duty who are in designated areas or to members who are exposed to hostile fire or explosion of hostile mines, or members who are in a foreign country in which the member was subject to the threat of physical harm or imminent danger on the basis of civil insurrection, civil war, terrorism, or wartime conditions [Ref. 1: p. 27].

**15. Foreign Language Proficiency Pay**

This pay is made to qualified officers whose military specialty requires proficiency in a foreign language. [Ref. 1: p. 27]

**16. Permanent Change of Station Travel**

These pays provide reimbursement to military personnel for expenses incident to permanent change of station (PCS) travel incurred individually or as part of organized units. A comprehensive listing of the specific elements covered by PCS

travel funding can be found in accession travel, training travel, operational travel, rotational travel, separation travel, and travel of organized units. Additionally, non-temporary storage and temporary lodging expense are costed separately.

#### **17. Other Indirect Costs**

Other indirect costs (OIC) include funds for death gratuities, survivor's benefits, and the accrual of educational benefits. [Ref. 1: pps. 95-99] Death gratuities are paid based on the paygrade of the deceased military member. Survivor's benefits are social security benefits paid to the survivors of military members and are paid based on the number of dependents. The educational benefits component provides for the accrual, in a trust fund, for those individuals entering active duty between July, 01, 1985 and June 30, 1988, of funds for the additional and supplemental benefit payments above a basic benefit to be budgeted by the Veterans Administration. [Ref. 1: pps. 96-99]

### **C. THE OFFICER BILLET COST MODEL**

The basic Officer Billet Cost Model (OBCM) is presented with each of the 17 components/elements of the MPN account being applied as a separate cost element using unique assumptions for each component. Table 1 presents the total officer billet cost for Commissioned Officers by paygrade using the basic OBCM. Table 2 presents the total officer billet cost for Warrant Officers by paygrade using the basic OBCM. The underlying assumptions applied to each component of the MPN account are discussed in the following paragraphs.

#### **1. Basic Pay**

Annual basic pay rates are computed by summing the amount of basic pay, paid by paygrade, and dividing the total by the amount of officer workyears experienced for that paygrade to arrive at an average rate per workyear for each paygrade. The basic pay rate applied to the OBCM is the rate computed by NMPC. [Ref. 1: p. 21]

#### **2. Retired Pay Accrual**

Retired pay accrual is computed by taking the normal cost percentage for a given year, as required by law, and multiplying it by the basic pay rate. For fiscal year 1986 the normal cost percentage is 50.7 percent of basic pay for the months of October 1985 through July 1986, and 42.0 percent for the months of August and September 1986.

TABLE 1

## OFFICER BILLET COST FOR COMMISSIONED OFFICERS

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
Officers	10,510.00	10,338.00	22,191.00	13,388.00	7,811.00	3,720.00	129.00	123.00



TABLE 2  
OFFICER BILLET COST FOR WARRANT OFFICERS

Cost Element	W-2	W-3	W-4
1. Basic Pay	23,040.66	26,661.20	32,072.11
2. Retired Pay			
Accrual	11,347.53	13,130.64	15,795.51
3. Social Security Tax	1,647.41	1,906.28	2,293.16
4. Basic Allowance			
For Quarters	3,414.91	4,516.83	4,403.38
5. Variable Housing			
Allowance	1,587.22	1,919.98	1,601.65
6. Basic Allowance For			
Subsistence	1,312.44	1,312.44	1,312.44
7. Station Allowances,			
Overseas	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00
9. Family Separation			
Allowances	48.88	48.88	48.88
10. Separation Payments	26.76	267.81	815.75
11. Experimental Pay	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00
13. Personal Money			
Allowance	0.00	0.00	0.00
14. Imminent Danger			
Pay	0.17	0.17	0.17
15. Foreign Language			
Proficiency Pay	0.00	0.00	0.00
16. Permanent Change of			
Station	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90
OFFICER BILLET COST	45,219.74	52,383.44	60,962.26
Officers	1,183.00	780.00	1,110.00

### 3. Social Security Tax

Social security tax rates are set by law based on a member's salary on a calendar year (CY) basis not to exceed a total given amount. This model employs the tax rate that corresponds with the fiscal year (FY) under consideration for ease of application.

#### **4. Basic Allowance For Quarters**

The BAQ rate is computed by multiplying the number of eligible officers by the statutory rates for each category of BAQ and summing these totals by paygrade. Each total is then divided by the paygrade population to arrive at the applied BAQ rate.

A component of government provided benefits is considered in developing the above rate. Family housing and government furnished quarters are provided to a portion of the officer population. It is assumed that family housing and government furnished quarters are fully occupied given maintenance and scheduling time. It is further assumed that family housing and government furnished quarters will continue to be occupied by the same mix of paygrades. If family housing and government furnished quarters were not available the MPN account would be required to provide BAQ to those members currently occupying family housing and government furnished quarters. Therefore, when determining the BAQ rate, to apply to the OBCM, the total BAQ paid by paygrade is divided by the total officer workyears experienced for that paygrade.

#### **5. Variable Housing Allowance**

VHA rates are computed by multiplying the number of eligible officers in each paygrade by the average rates experienced during the fiscal year. [Ref. 1: p. 32] Total VHA computed for each paygrade is divided by total officer workyears experienced for that paygrade using the same assumptions that apply to BAQ.

#### **6. Basic Allowance For Subsistence**

The FY 86 statutory rate for BAS is applied across the board to all officers.

#### **7. Station Allowances, Overseas**

The total budgeted amount for this MPN component is applied across the board based on total officer workyears experienced as this allowance cannot be readily attributed to one specific paygrade or a specific program.

#### **8. Uniform Allowance**

The total budgeted amount for this MPN component is divided by the workyears experienced for O-1s and W-2s to arrive at the uniform allowance rate as applied in the OBCM.

There are a number of officers who receive this allowance, (e. g., aviation officer candidates, regular officer candidates, and reserves upon entry or reentry on active duty for 90 days or more) [Ref. 1: p. 35] but O-1s and W-2s receive the major



portion of the funding identified for this allowance, when they are commissioned and therefore this allowance is evenly divided over the O-1 and W-2 population.

#### **9. Family Separation Allowance**

The total budgeted amount for this MPN component is applied across the board based on total officer workyears experienced since this allowance cannot be readily attributed to one specific paygrade or a specific program.

#### **10. Separation Payments**

Separation payments are applied individually by paygrade based on the underlying assumptions of each category. The individual rates calculated for the four categories of separation payments are summed, as applicable, to arrive at the total rate applied to each paygrade.

##### ***a. Lump Sum Terminal Leave Payments***

Lump sum terminal leave rates are calculated by multiplying the total number of eligible personnel in a paygrade by the average rate experienced for that paygrade, and dividing the total computed by the officer workyears experienced for that paygrade. The number of eligible personnel and average rates used were derived from NMPC data. [Ref. 1: p. 38]

##### ***b. Lump Sum Payments to Reservists***

This category includes those reservists who are involuntarily released from active duty after having completed at least five years of active duty. The majority of officers that fall in this category are O-3s and O-4s, assuming O-5s would be allowed to retire and O-2s would not be kept to the five year point or would be promoted to O-3. [Ref. 8]

The total budgeted amount for this MPN component is divided by the officer workyears experienced for both O-3s and O-4s to arrive at an overall rate which is applied to both paygrades.

##### ***c. Severance Pay, Failure of Promotion***

It is assumed that officers of the O-3 population collect the majority of this type of separation payment. With essentially an 100 percent promotion rate few O-2s are passed over, current Department of Defense (DOD) policy is to continue O-4s to 20 years at which time they are retired, and O-5s who fail to promote are retired when they reach the maximum service limitation. [Ref. 8]

The total budgeted amount for this MPN component is divided by the officer workyears experienced for O-3s to arrive at the overall rate applied.

*d. Severance Pay, Disability*

Severance pay for disability cannot be easily attributed to a specific paygrade or program, therefore, it is averaged across all officers. The total budgeted amount is divided by total officer workyears experienced to arrive at an individual rate.

**11. Experimental Pay**

The experimental pay rate is a flat rate for individuals who perform these types of duties.

The total budgeted amount for this hazardous duty pay is averaged over the officer population, paygrades O-1 through O-6, in the basic model. It is assumed that Flag Officers will not perform this type of duty.

**12. Toxic Material Pay**

The toxic material pay rate is a flat rate for individuals who perform this type of duty. Currently this category of special pay is not being paid.

The total budgeted amount for this hazardous duty pay is averaged over the officer population, paygrades O-1 through O-6, in the basic model since this allowance cannot be readily attributed to one specific paygrade or a specific program. It is assumed that Flag Officers will not perform this type of duty.

**13. Personal Money Allowance**

Personal money allowances including special allowances are averaged across O-8s and above. The officers filling the positions as described in paragraph B.13 account for all O-9s and O-10s and encompass some O-8s. An O-8 can be spot promoted to fill these positions, with Congressional approval, at any time, justifying averaging this allowance over the three paygrades. Personal money allowance is less than one percent of the O-8 to O-10 pay but must be included for completeness. If the personal money allowance was not included for O-8s the O-9s and O-10s cost would increase by an immaterial amount.

**14. Imminent Danger Pay**

The imminent danger pay rate is a flat rate.

The total budgeted amount for this pay category is averaged over the total officer population as this pay cannot be readily attributed to one specific paygrade or a specific program.

**15. Foreign Language Proficiency Pay**

Currently this category of special pay is not being utilized and a rate of pay has not been identified. One specific program or designator cannot be identified as

exclusively requiring this skill. The assumption made is that future budgeted amounts for this category will be incorporated into the basic OBCM by averaging the cost across all paygrades.

#### **16. Permanent Change of Station Travel**

The PCS travel rate is computed by summing the budgeted amount for the six categories of PCS travel for officers and averaging the total budgeted over the officer population. Additionally, the budgeted amounts for non-temporary storage and temporary lodging expense are summed and averaged over both the officer and enlisted populations arriving at the same overall rate per individual for these two elements.

The underlying assumption for this individual MPN component is that an equal share of PCS travel is received by all officers. While this assumption is unrealistic there appears to be no better way to apportion this pay at this time because of unavailability of data by paygrade.

#### **17. Other Indirect Costs**

The OIC rate is computed by summing each of the individual rates for death gratuity, survivor's benefit, and educational benefit. The underlying assumption applied to these MPN components is that each paygrade benefits equally. While this assumption is unrealistic the cost in question is not a material amount and there appears to be no other way to apportion these funds at this time due to the structure of the data used.

##### ***a. Death Gratuity Rate***

The death gratuity rate is calculated by taking the MPN budgeted amount for officers and averaging it across the officer population.

##### ***b. Survivor's Benefit Rate***

The survivor's benefit rate is calculated by taking the MPN budgeted amount and averaging it across both the officer and enlisted populations.

##### ***c. Educational Benefit Rate***

The educational benefit rate is calculated by taking the MPN budgeted amount and averaging it across both the officer and enlisted populations. Accrual of educational benefits does not begin until FY87.

### **D. DESCRIPTION OF THE OFFICER BILLET COST MODEL**

To arrive at the officer billet cost for each paygrade, assumptions are made depending on the pay category and paygrade under consideration. Tables 26 through 36 in Appendix A provide the equations used in calculating the officer billet cost by paygrade.

## **E. COMPONENTS OF THE SUBMODELS**

Incentive pays for hazardous duty and special pays are components of the MPN account which are composed of several elements. When individually applied, they set some designators apart from others, making the construction of a single model to apply across the board unrealistic. Such a single model would be unrepresentative of the officer population as is the average cost model used today. Because of these differences, twenty-four submodels are constructed to reflect the quality and special skills required to fill these designators where incorporation into the basic model is not feasible (i. e., Aviation Warfare Submodels, Submarine Warfare Submodels, Medical Corps Submodel, Dental Corps Submodel).

Four elements of incentive pays for hazardous duty and special pays have been incorporated into the basic OBCM because specific application cannot be made. However, the balance of incentive pays for hazardous duty and special pays can be identified with specific designators and are incorporated into the twenty-four submodels.

### **1. Incentive Pay for Hazardous Duty**

These incentive pays are designed to attract and retain personnel in certain careers. The categories of hazardous duty pays that are built into individual submodels include; flying duty, submarine duty, parachute jumping, demolition duty, and flight deck duty.

Entitlement to hazardous duty pay is determined by job assignment.

### **2. Special Pay**

Special pay provides compensation to an officer for the advanced skills and/or additional responsibilities required by their designator/job. The categories of special pays that are built into individual submodels include; physicians' pay, dentists' pay, optometrists' pay, responsibility pay, diving duty pay, nuclear officer incentive pay, and sea pay.

Entitlement to special pay is determined by job assignment.

## **F. AVIATION WARFARE SUBMODELS**

Tables 4 through 10 illustrate the officer billet cost and submodel costs by designator and paygrade for the Aviation Warfare Submodels. Tables 37 through 43, in Appendix A, provide the equations used in calculating total officer billet cost by designator for the Aviation Warfare submodels.



## 1. Flying Duty Pay

### *a. Commissioned Officers*

Aviation career incentive pay (ACIP) rates are based on length of aviation service.

This hazardous duty pay is paid to all aviation officers with 131X, 132X, 137X, 139X, 630X, and 7321 designators in paygrades O-1 through O-6. The applied rates are calculated using pay rates based on length of aviation service and a promotion flow that assumes officers will be promoted to the next paygrade in the minimum amount of time. [Refs. 8,9] Table 3 illustrates the minimum promotion flow. [Ref. 8] In the cases where more than one rate applies, rates are averaged over the number of years required by paygrade.

**TABLE 3**  
**PROMOTION FLOW POINTS FOR COMMISSIONED OFFICERS**

To Grade Of	Years Commissioned Service
LTJG	Two
LT	Four
LCDR	Nine
CDR	Fifteen
CAPT	Twenty-one
RADM(L)	Twenty-four
RADM(U)	Twenty-five
VADM/ADM	Any Time After Selected for CAPT

Officers in the training categories, 137X and 139X designators, are assumed to have no prior aviation service and are assigned the minimum rate of \$1,500.00 per year. Aviation officers start receiving ACIP upon entering aviation training.

### *b. Warrant Officers*

Warrant officers with an 7321 designator are naval aviators who may qualify to receive ACIP. The applied rates are calculated by taking the MPN budgeted amount of ACIP for Warrant Officers and dividing it by the end strength officer population with the 7321 designator as specific individuals cannot be identified as receiving this pay with this submodel.



*c. Non-Crew*

The non-crew rate is a flat rate.

This ACIP pay is designated for those aviation officers who are currently performing in areas other than those designated as aviation warfare but are maintaining minimum flight requirements.

The budgeted amount for this element is distributed evenly to the O-4s, O-5s, and O-6s with 131X and 132X designators as these officers are the most representative of those collecting the non-crew rate. These officers retain their designators as long as they maintain minimum qualifications.

*d. Continuation Pay*

To qualify for aviation officer continuation pay (AOCP) the first term of obligated service must be complete, certain flying requirements met, and the officer may not have served more than sixteen years as an aviator. This lump sum bonus is paid to an aviation officer who in turn promises to serve five more years as a pilot or naval flight officer (NFO). [Ref. 10]

The budgeted amount of AOCP for pilots is averaged among the O-3s and O-4s with an 131X designator and the budgeted amount for NFOs is averaged among the O-3s and O-4s with an 132X designator. The O-3s and O-4s of these designator populations are most representative of those officers receiving AOCP.

**2. Career Sea Pay**

Career sea pay is paid to officers in paygrades O-1 through O-6, and is based on paygrade and length of sea service. An officer must accumulate three years of sea service before being eligible to collect career sea pay.

Career sea pay is a variable amount paid monthly to officers on active duty who are permanently or temporarily serving on a ship, the primary mission of which is accomplished while underway, or while serving as a member of the off crew of a two-crewed submarine; or when serving on a ship, the primary mission of which is accomplished while in port, career sea pay is earned only during a period that the ship is away from its home port for 30 consecutive days or more. [Ref. 1: p. 27]

The career sea pay rates used in the Aviation Warfare submodels are calculated by taking the MPN budgeted amount, by paygrade, and dividing it by the same paygrade population including the 111X, 112X, 131X, 132X, 61XX, 62XX, 63XX, 640X, 71XX, 72XX, 73XX, and 740X designators. These designators are most

TABLE 3  
AVIATION WARFARE - PILOT  
DESIGNATOR 13IX

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Flying Duty								
a. ACIP	1,500.00	2,064.00	3,869.00	4,800.00	4,560.00	3,840.00	0.00	0.00
b. Non-crew	0.00	0.00	0.00	0.00	27.19	27.19	0.00	0.00
c. AOCIP	0.00	0.00	1,219.44	1,219.44	0.00	0.00	0.00	0.00
S2. Career Sea Pay	431.99	306.32	421.65	714.24	725.62	536.57	0.00	0.00
S3. Premium Sea Pay	78.90	78.90	78.90	78.90	78.90	78.90	0.00	0.00
TOTAL 13IX COST	35,055.10	44,740.03	58,666.27	70,045.40	81,136.55	95,830.26	104,357.49	118,156.48
Officers	416.00	1,456.00	3,431.00	2,115.00	1,565.00	551.00	0.00	0.00

TABLE 4

AVIATION WARFARE - NFO  
DESIGNATOR 132X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Flying Duty								
a. ACIP	1,500.00	2,064.00	3,869.00	4,800.00	4,560.00	3,840.00	0.00	0.00
b. Non-crew	0.00	0.00	0.00	0.00	27.19	27.19	0.00	0.00
c. AOCIP	0.00	0.00	1,004.18	1,004.18	0.00	0.00	0.00	0.00
S2. Career Sea Pay	431.99	306.32	421.65	714.24	725.62	536.57	0.00	0.00
S3. Premium Sea Pay	78.90	78.90	78.90	78.90	78.90	78.90	0.00	0.00
TOTAL 132X COST	35,055.10	44,740.03	58,451.01	69,830.14	81,136.55	95,830.26	104,357.49	118,156.48
Officers (132X)	256.00	926.00	2,014.00	1,332.00	635.00	154.00	0.00	0.00

TABLE 6  
AVIATION WARFARE - TRAINING  
DESIGNATORS 137X & 139X

Cost Element	O-1	O-2	O-3
1. Basic Pay	16,194.99	21,614.30	27,470.86
2. Retired Pay			
Accrual	7,976.03	10,645.04	13,529.40
3. Social Security Tax	1,157.94	1,545.42	1,964.17
4. Basic Allowance			
For Quarters	2,615.44	3,153.96	3,990.86
5. Variable Housing			
Allowance	927.16	1,250.97	1,596.33
6. Basic Allowance			
For Subsistence	1,312.44	1,312.44	1,312.44
7. Station Allowances,			
Overseas	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00
9. Family Separation			
Allowance	48.88	48.88	48.88
10. Separation			
Payments	17.40	100.42	544.96
11. Experimental Pay	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00
13. Personal Money			
Allowance	0.00	0.00	0.00
14. Imminent Danger			
Pay	0.17	0.17	0.17
15. Foreign Language			
Proficiency Pay	0.00	0.00	0.00
16. Permanent Change of			
Station	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28
S1. Flying Duty			
a. ACIP	1,500.00	1,500.00	1,500.00
TOTAL 137X & 139X COST	34,544.21	43,790.81	54,577.28
Officers	3,160.00	143.00	26.00



TABLE 6  
LIMITED DUTY OFFICER - AVIATION  
DESIGNATOR 63XX

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Career Sea Pay	431.99	306.32	421.65	714.24	725.62	536.57	0.00	0.00
S2. Premium Sea Pay	78.90	78.90	78.90	78.90	78.90	78.90	0.00	0.00
TOTAL 63XX COST Officers	33,555.10	42,676.03	53,577.83	64,025.96	76,549.36	91,963.07	104,357.49	118,156.48
	133.00	138.00	494.00	157.00	69.00	1.00	0.00	0.00



TABLE 8  
LIMITED DUTY OFFICER - AVIATOR  
DESIGNATOR 630X

Cost Element	O-1	O-2	O-3	O-4
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70
11. Experimental Pay	1.62	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00
14. Imminent Danger Pay	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82
S1. Flying Duty Pay				
a. ACIP	1,500.00	2,064.00	3,869.00	4,800.00
S2. Career Sea Pay	431.99	306.32	421.65	714.24
S3. Premium Sea Pay	78.90	78.90	78.90	78.90
TOTAL 630X COST	35,055.10	44,740.03	57,446.83	68,825.96
Officers	13.00	14.00	38.00	0.00

TABLE 9  
WARRANT - AVIATION  
DESIGNATOR 73XX

Cost Element	W-2	W-3	W-4
1. Basic Pay	23,040.66	26,661.20	32,072.11
2. Retired Pay			
Accrual	11,347.53	13,130.64	15,795.51
3. Social Security Tax	1,647.41	1,906.28	2,293.16
4. Basic Allowance			
For Quarters	3,414.91	4,516.83	4,403.38
5. Variable Housing			
Allowance	1,587.22	1,919.98	1,601.65
6. Basic Allowance For			
Subsistence	1,312.44	1,312.44	1,312.44
7. Station Allowances,			
Overseas	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00
9. Family Separation			
Allowances	48.88	48.88	48.88
10. Separation Payments	26.76	267.81	815.75
11. Experimental Pay	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00
13. Personal Money			
Allowance	0.00	0.00	0.00
14. Imminent Danger			
Pay	0.17	0.17	0.17
15. Foreign Language			
Proficiency Pay	0.00	0.00	0.00
16. Permanent Change of			
Station	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90
OFFICER BILLET COST	45,219.74	52,383.44	60,962.26
S1. Career Sea Pay	1,336.75	1,011.27	859.82
S2. Premium Sea Pay	78.90	78.90	78.90
TOTAL 73XX COST	46,635.39	53,473.61	61,900.98
Officers	168.00	163.00	245.00

TABLE 10  
WARRANT - AVIATOR  
DESIGNATOR 7321

Cost Element	W-2	W-3	W-4
1. Basic Pay	23,040.66	26,661.20	32,072.11
2. Retired Pay			
Accrual	11,347.53	13,130.64	15,795.51
3. Social Security Tax	1,647.41	1,906.28	2,293.16
4. Basic Allowance			
For Quarters	3,414.91	4,516.83	4,403.38
5. Variable Housing			
Allowance	1,587.22	1,919.98	1,601.65
6. Basic Allowance For			
Subsistence	1,312.44	1,312.44	1,312.44
7. Station Allowances,			
Overseas	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00
9. Family Separation			
Allowances	48.88	48.88	48.88
10. Separation Payments	26.76	267.81	815.75
11. Experimental Pay	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00
13. Personal Money			
Allowance	0.00	0.00	0.00
14. Imminent Danger			
Pay	0.17	0.17	0.17
15. Foreign Language			
Proficiency Pay	0.00	0.00	0.00
16. Permanent Change of			
Station	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90
OFFICER BILLET COST	45,219.74	52,383.44	60,962.26
S1. Flying Duty Pay			
a. ACIP	1,030.30	1,030.30	1,030.30
S2. Career Sea Pay	1,336.75	1,011.27	859.82
S3. Premium Sea Pay	78.90	78.90	78.90
TOTAL 7321 COST	47,665.69	54,503.91	62,931.28
Officers	10.00	15.00	8.00

representative of those collecting career sea pay. It is realized that all officers with these designators do not collect career sea pay. There are also officers with other designators that do collect career sea pay. However, the amount in question is not material and to be more accurate would not change the total cost of an officer by more than one percent.

### **3. Premium Sea Pay**

The premium sea pay rate is a flat rate. Premium sea pay is paid to officers who are entitled to career sea pay and who have served more than thirty-six consecutive months on sea duty. [Ref. 1: p. 27]

The rate used in the Aviation Warfare submodels is calculated by taking the MPN budgeted amount for premium sea pay and dividing it by the population which includes the 111X, 112X, 131X, 132X, 61XX, 62XX, 63XX, 640X, 71XX, 72XX, 73XX, and 740X designators for the paygrades O-1 through O-6. These designators are most representative of those collecting premium sea pay. It is realized that all officers with these designators do not collect premium sea pay. There are also officers with other designators that do collect premium sea pay. However, the amount in question is not material and to be more accurate would not change the total cost of an officer by more than one-half of one percent.

## **G. SUBMARINE WARFARE SUBMODELS**

Tables 11 through 16 illustrate the officer billet costs and submodel costs by designator and paygrade for the Submarine Warfare Submodels. Tables 44 through 49, in Appendix A, provide the equations used in calculating total officer billet cost by designator for the Submarine Warfare Submodels.

### **1. Submarine Duty Pay**

#### ***a. Commissioned Officers***

Submarine duty rates are based on paygrade and length of submarine service.

This hazardous duty pay is paid to all submarine officers with 112X, 62XX and 117X designators in paygrades O-1 through O-9.

The applied rates are calculated using a promotion flow that assumes officers will be promoted to the next paygrade in the minimum amount of time, see Table 3, and pay rates based on length of submarine service. [Refs. 8,9]

TABLE 11  
SUBMARINE WARFARE  
DESIGNATOR 112X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Submarine Duty Pay	1,560.00	2,100.00	4,560.00	5,280.00	5,280.00	5,280.00	3,500.00	3,180.00
S2. Nuclear Officer Incentive Pay	4,606.93	4,606.93	4,606.93	4,606.93	4,606.93	4,606.93	0.00	0.00
S3. Career Sea Pay	431.99	306.32	421.65	714.24	725.62	536.57	0.00	0.00
S4. Premium Sea Pay	78.90	78.90	78.90	78.90	78.90	78.90	0.00	0.00
S5. Responsibility Pay	0.00	0.00	0.00	0.00	464.38	464.38	0.00	0.00
TOTAL 112X COST	39,722.03	49,382.96	62,744.76	73,912.89	86,900.67	102,314.38	107,857.49	121,336.48
Officers 112X	7.00	335.00	1,263.00	730.00	396.00	316.00	15.00	18.00



TABLE 12  
SUBMARINE WARFARE - TRAINING  
DESIGNATOR 117X

Cost Element	O-1	O-2	O-3	O-4
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44
2. Retired Pay				
Accrual	7,976.03	10,645.04	13,529.40	16,369.93
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55
4. Basic Allowance				
For Quarters	2,615.44	3,153.96	3,990.86	5,037.78
5. Variable Housing				
Allowance	927.16	1,250.97	1,596.33	1,887.72
6. Basic Allowance				
For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances,				
Overseas	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00
9. Family Separation				
Allowance	48.88	48.88	48.88	48.88
10. Separation				
Payments	17.40	100.42	544.96	341.70
11. Experimental Pay	1.62	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00	0.00
13. Personal Money				
Allowance	0.00	0.00	0.00	0.00
14. Imminent Danger				
Pay	0.17	0.17	0.17	0.17
15. Foreign Language				
Proficiency Pay	0.00	0.00	0.00	0.00
16. Permanent Change of				
Station	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82
S1. Submarine Duty Pay	1,560.00	2,100.00	3,180.00	3,240.00
TOTAL 117X COST	34,604.21	44,390.81	56,257.28	66,472.82
Officers 117X	1,150.00	837.00	79.00	1.00

TABLE 13  
LIMITED DUTY OFFICER - SUBMARINE WARFARE  
DESIGNATOR 62XX

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Submarine Duty Pay	1,560.00	2,100.00	4,560.00	5,280.00	5,280.00	5,280.00	3,500.00	3,180.00
S2. Career Sea Pay	431.99	306.32	421.65	714.24	725.62	536.57	0.00	0.00
S3. Premium Sea Pay	78.90	78.90	78.90	78.90	78.90	78.90	0.00	0.00
TOTAL 62XX COST Officers 62XX	35,115.10	44,776.03	58,137.83	69,305.96	81,829.36	97,243.07	107,857.49	121,336.48
	67.00	107.00	272.00	92.00	14.00	4.00	0.00	0.00

### ***b. Warrant Officers***

Warrant officers with an 72XX designator are submariners who qualify for submarine duty pay when attached to a submarine for duty. The rates used in the Submarine Warfare Submodel are the average rates experienced for this community. [Ref. 1: p. 25]

#### **2. Nuclear Officer Incentive Pay**

Nuclear officer incentive pay is composed of four elements: nuclear officer accession bonus, nuclear career accession bonus, nuclear officer continuation pay, and nuclear career annual incentive bonus. [Ref. 11]

Nuclear officer incentive pay is applied in the Submarine Warfare Submodel by averaging the MPN budgeted amount across the Limited Duty Officers with an 640X designator and the Warrant Officers with an 740X designator because the designator indicates nuclear power training. This pay is also averaged across those officers with an 112X designator, paygrades O-1 through O-6, as a significant portion of these officers will be nuclear qualified but cannot be specifically identified with the data used for this model.

#### **3. Career Sea Pay**

As described in the Aviation Warfare Submodels career sea pay is paid to officers in paygrades O-1 through O-6, and is based on paygrade and length of sea service. An officer must accumulate three years of sea service before being eligible to collect career sea pay.

The career sea pay rates used in the Submarine Warfare Submodels are calculated by taking the MPN budgeted amount, by paygrade, and dividing it by the same paygrade population including the 111X, 112X, 131X, 132X, 61XX, 62XX, 63XX, 640X, 71XX, 72XX, 73XX, and 740X designators. These designators are most representative of those collecting career sea pay. It is realized that all officers with these designators do not collect career sea pay. There are also officers with other designators that do collect career sea pay. However, the amount in question is not material and to be more accurate would not change the total cost of an officer by more than one percent.

#### **4. Premium Sea Pay**

As described in the Aviation Warfare Submodels the premium sea pay rate is a flat rate. Premium sea pay is paid to officers who are entitled to career sea pay and who have served more than thirty-six consecutive months on sea duty. [Ref. 1: p. 27]

TABLE 14  
LIMITED DUTY OFFICER - NUCLEAR POWER  
DESIGNATOR 640X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Submarine Duty Pay	1,560.00	2,100.00	4,560.00	5,280.00	5,280.00	5,280.00	3,500.00	3,180.00
S2. Nuclear Officer Incentive Pay	4,606.93	4,606.93	4,606.93	4,606.93	4,606.93	4,606.93	0.00	0.00
S3. Career Sea Pay	431.99	306.32	421.65	714.24	725.62	536.57	0.00	0.00
S4. Premium Sea Pay	78.90	78.90	78.90	78.90	78.90	78.90	0.00	0.00
TOTAL 640X COST	39,722.03	49,382.96	62,744.76	73,912.89	86,436.26	101,850.00	107,857.49	121,336.48
Officers 64XX	80.00	55.00	132.00	99.00	12.00	1.00	0.00	0.00



The rate used in the Submarine Warfare Submodels is calculated by taking the MPN budgeted amount for premium sea pay and dividing it by the population which includes the 111X, 112X, 131X, 132X, 61XX, 62XX, 63XX, 640X, 71XX, 72XX, 73XX, and 740X designators for the paygrades O-1 through O-6. These designators are most representative of those collecting premium sea pay. It is realized that all officers with these designators do not collect premium sea pay. There are also officers with other designators that do collect premium sea pay. However, the amount in question is not material and to be more accurate would not change the total cost of an officer by more than one-half of one percent.

#### **5. Responsibility Pay**

Responsibility pay varies by paygrade. Responsibility pay is paid to officers on active duty serving in Secretary of the Navy designated positions of unusual responsibility which are of a critical nature to the Navy [Ref. 1: p. 26]. Responsibility pay is paid to officers who have command of a ship or submarine.

Responsibility pay is applied to the Submarine Warfare and Surface Warfare Submodels by averaging the MPN budgeted amount over the officers in paygrades O-5 and O-6 with 111X and 112X designators. There are pay rates identified for O-3s through O-6s for this pay category. Currently, there are no sea command billets slated/filled by O-3s and approximately one percent of the sea command billets are filled by O-4s. Therefore, O-5s and O-6s receive the majority of responsibility pay and the amount which should be allocated to O-4s is not material in amount.

### **H. SPECIAL WARFARE/OPERATIONS SUBMODELS**

Tables 17 through 19 illustrate the officer billet cost and submodel costs by designator and paygrade for the Special Warfare/Operations Submodels. Tables 50 through 52, in Appendix A, provide the equations used for calculating total officer billet cost by designator for the Special Warfare/Operations Submodels.

#### **1. Demolition Duty**

The demolition duty pay rate is a flat rate. This hazardous duty pay is paid when the demolition of explosives is considered a primary duty to include training for such duty. [Ref. 1: p. 23]

The total budgeted amount for this category is averaged over those officers with 113X, 114X, 118X, and 119X designators since this type of duty is a specific job requirement for these designators.



TABLE 15  
WARRANT - SUBMARINE WARFARE  
DESIGNATOR 72XX

Cost Element	W-2	W-3	W-4
1. Basic Pay	23,040.66	26,661.20	32,072.11
2. Retired Pay			
Accrual	11,347.53	13,130.64	15,795.51
3. Social Security Tax	1,647.41	1,906.28	2,293.16
4. Basic Allowance			
For Quarters	3,414.91	4,516.83	4,403.38
5. Variable Housing			
Allowance	1,587.22	1,919.98	1,601.65
6. Basic Allowance For			
Subsistence	1,312.44	1,312.44	1,312.44
7. Station Allowances,			
Overseas	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00
9. Family Separation			
Allowances	48.88	48.88	48.88
10. Separation Payments	26.76	267.81	815.75
11. Experimental Pay	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00
13. Personal Money			
Allowance	0.00	0.00	0.00
14. Imminent Danger			
Pay	0.17	0.17	0.17
15. Foreign Language			
Proficiency Pay	0.00	0.00	0.00
16. Permanent Change of			
Station	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90
OFFICER BILLET COST	45,219.74	52,383.44	60,962.26
S1. Submarine Duty Pay	3,180.00	3,180.00	3,180.00
S2. Career Sea Pay	1,336.75	1,011.27	859.82
S3. Premium Sea Pay	78.90	78.90	78.90
TOTAL 72XX COST	49,815.39	56,653.61	65,080.98
Officers	88.00	58.00	51.00

## **2. Diving Duty**

The diving duty pay rate is a flat rate. This pay is paid to those officers on active duty assigned to diving duty, and are required to maintain proficiency as divers and must actually perform diving duty. [Ref. 1: p. 27]

This pay is applied to the Special Warfare Operations Submodels by averaging the total budgeted amount over the officers with 113X, 114X, 118X, and 119X designators since this type of duty is a specific job requirement for these designators.

## **3. Parachute Jumping**

The parachute jumping pay rate is a flat rate.

The total budgeted amount for this hazardous duty pay category is averaged over the special warfare officer population having an 113X designator since this type of duty is a specific job requirement for this designator.

# **I. MEDICAL CORPS SUBMODEL**

Table 20 illustrates the officer billet costs and submodel costs by designator and paygrade for the Medical Corps Submodel. Table 53, in Appendix A, provides the equations used in calculating total officer billet cost for the Medical Corps Submodel designator 210X.

## **1. Physicians' Pay**

Navy physicians, designator 210X, enter the service as Lieutenants and generally have completed an internship as part of their medical training prior to entering the Navy.

### ***a. Variable Pay***

Variable pay rates for physicians is based on length of creditable service. The rates used in the submodel for physicians are calculated using a pay rate structure based on paygrade and length of creditable service, and a minimum promotion flow. [Refs. 8,9] Table 3 illustrates the minimum promotion flow. [Ref. 8] In the case where more than one rate applies to a paygrade, the combined rates are averaged over the number of years required for that paygrade reflecting the average rate experienced for that paygrade.

### ***b. Additional Pay***

The additional pay rate for physicians is based on length of creditable service. The rates used in the submodel are calculated by taking the MPN budgeted

TABLE 16  
WARRANT - NUCLEAR POWER  
DESIGNATOR 740X

Cost Element	W-2	W-3	W-4
1. Basic Pay	23,040.66	26,661.20	32,072.11
2. Retired Pay			
Accrual	11,347.53	13,130.64	15,795.51
3. Social Security Tax	1,647.41	1,906.28	2,293.16
4. Basic Allowance			
For Quarters	3,414.91	4,516.83	4,403.38
5. Variable Housing			
Allowance	1,587.22	1,919.98	1,601.65
6. Basic Allowance For			
Subsistence	1,312.44	1,312.44	1,312.44
7. Station Allowances,			
Overseas	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00
9. Family Separation			
Allowances	48.88	48.88	48.88
10. Separation Payments	26.76	267.81	815.75
11. Experimental Pay	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00
13. Personal Money			
Allowance	0.00	0.00	0.00
14. Imminent Danger			
Pay	0.17	0.17	0.17
15. Foreign Language			
Proficiency Pay	0.00	0.00	0.00
16. Permanent Change of			
Station	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90
OFFICER BILLET COST	45,219.74	52,383.44	60,962.26
S1. Nuclear Officer			
Incentive Pay	4,606.93	4,606.93	4,606.93
S2. Career Sea Pay	1,336.75	1,011.27	859.82
S3. Premium Sea Pay	78.90	78.90	78.90
TOTAL 740X COST	51,242.32	58,080.54	66,507.91
Officers	300.00	153.00	217.00

amount for this element and averaging it over the Medical Corps population. Specific individuals receiving this pay cannot be specifically identified from the data used for this study and calculating rates associated with specific paygrades would vary the cost per paygrade by less than two percent. immaterial amount.

*c. Board Certified Pay*

Board certified rates, which vary with length of creditable service, are paid to Medical Corps officers who become certified or recertified as having successfully met specified post-graduate education, training and experience requirements in a medical or osteopathic specialty [Ref. 1: p. 26].

The rate applied in the submodel is calculated by averaging the MPN budgeted amount for this category over the Medical Corps population. Specific individuals receiving this pay cannot be specifically identified from the data used for this study and calculating rates associated with specific paygrades would vary the cost per paygrade by less than one percent.

*d. Medical Incentive Pay*

Medical incentive pay is paid to Medical Corps officers meeting certain criteria who agree to remain on active duty for a period greater than one year. [Ref. 1: p. 26]

The rate applied in the submodel is calculated by averaging the MPN budgeted amount for this category over the Medical Corps population paygrades O-3 through O-6. Specific individuals receiving this pay cannot be specifically identified from the data used for this study and the total cost is not material in amount.

## **J. DENTAL CORPS SUBMODEL**

Table 21 illustrates the officer billet costs and submodel costs by designator and paygrade for the Dental Corps Submodel. Table 54, in Appendix A, provides the equations used in calculating total officer billet cost for the Dental Corps Submodel designator 220X.

**1. Dentists' Pay**

Navy dentists, designator 220X, enter the service as Lieutenants and generally have completed an internship as part of their dental training prior to entering the Navy.

*a. Variable Pay*

The variable pay rate for dentists is based on length of creditable service. The rates used in the submodel for dentists are calculated using the rate structure

TABLE 17  
SPECIAL WARFARE  
DESIGNATOR 113X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Demolition Duty	538.01	538.01	538.01	538.01	538.01	538.01	0.00	0.00
S2. Diving Duty	2,929.20	2,929.20	2,929.20	2,929.20	2,929.20	2,929.20	0.00	0.00
S3. Parachute Jump	670.41	670.41	670.41	670.41	670.41	670.41	0.00	0.00
TOTAL 113X COST	37,181.83	46,428.43	57,214.90	67,370.44	79,882.46	95,485.22	104,357.49	118,156.48
Officers 113X	12.00	40.00	113.00	86.00	52.00	14.00	0.00	0.00



based on paygrade and length of creditable service and a minimum promotion flow. [Refs. 8,9] Table 3 illustrates the minimum promotion flow. [Ref. 8] In the case where more than one rate applies to a paygrade, the combined rates are averaged over the number of years required for that paygrade reflecting the average rate experienced for that paygrade.

*b. Additional Pay*

The additional pay rate for dentists is based on length of creditable service. The rates used in the submodel for each paygrade are based on a minimum promotion flow assumption. [Ref. 8] In the case where more than one rate applies to a paygrade, the combined rates are averaged over the number of years required for that paygrade reflecting the average rate experienced for that paygrade.

*c. Board Certified Pay*

Board certified rates, which vary with length of creditable service, are paid to Dental Corps officers who attain board certification or board certification equivalency requirements. [Ref. 1: p. 26]

The rate used in the submodel is calculated by averaging the MPN budgeted amount for this category over the Dental Corps population since this pay is job specific. Specific officers receiving this pay cannot be specifically identified from the data used for this study and calculating rates associated with specific paygrades would vary the cost per paygrade by less than one-half of one percent.

*d. Saved Pay*

Saved pay is the difference in the annual amount of special pays a dental officer may be entitled to due to changes in the dental special pay rates effective 01 October 1985. The rate used in the submodel is calculated by averaging the MPN budgeted amount for this category over the Dental Corps population since this pay is job specific. Specific officers receiving this pay cannot be specifically identified from the data used for this study and calculating rates associated with specific paygrades would vary the cost per paygrade by less than one-half of one percent.

**K. MEDICAL SERVICE CORPS SUBMODEL**

Table 22 illustrates the officer billet costs and submodel costs by designator and paygrade for the Medical Service Corps Submodel. Table 55, in Appendix A, provides the equations used in calculating total officer billet cost for the Medical Service Corps Submodel designator 230X.

TABLE 18  
SPECIAL OPERATIONS  
DESIGNATOR 114X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay								
Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Demolition Duty	538.01	538.01	538.01	538.01	538.01	538.01	0.00	0.00
S2. Diving Duty	2,929.20	2,929.20	2,929.20	2,929.20	2,929.20	2,929.20	0.00	0.00
TOTAL 114X COST	36,511.42	45,758.02	56,544.49	66,700.03	79,212.05	94,814.81	104,357.49	118,156.48
Officers 114X	0.00	44.00	188.00	104.00	38.00	10.00	0.00	0.00

### **1. Optometrists' Pay**

The total number of optometrists in the Medical Service Corps, designator 230X, can be determined but cannot be specifically identified from the data used in this study. Therefore, the total budgeted amount for optometrist's pay is averaged over the 230X designator population for the paygrades O-3 through O-8. The total cost is not material in amount, that is less than one-half of one percent of the total Medical Service Corps cost. It is included for completeness and currently there is no practical way to be more accurate.

## **L. SURFACE WARFARE SUBMODELS**

Tables 23 through 25 illustrates the officer billet cost and submodel costs by designator and paygrade for the Surface Warfare Submodels. Tables 56 through 58, in Appendix A, provide the equations used in calculating total officer billet cost by designator for the Surface Warfare Submodels.

### **1. Responsibility Pay**

As described in the Submarine Warfare Submodels responsibility pay varies by paygrade. Responsibility pay is paid to officers on active duty serving in Secretary of the Navy designated positions of unusual responsibility which are of a critical nature to the Navy [Ref. 1: p. 26]. Responsibility pay is paid to officers who have command of a ship or submarine.

Responsibility pay is applied to the Submarine Warfare and Surface Warfare submodels by averaging the MPN budgeted amount over the officers in paygrades O-5 and O-6 with 111X and 112X designators. There are pay rates identified for O-3s through O-6s for this pay category. Currently, there are no sea command billets slated/filled by O-3s and approximately one percent of the sea command billets filled by O-4s. Therefore, O-5s and O-6s receive the majority of responsibility pay and the amount which should be allocated to O-4s is not material in amount.

### **2. Flight Deck Duty**

The rate for flight deck duty is a flat rate which is received when participating in flight operations on ships from which aircraft are launched [Ref. 1: p. 23].

The total budgeted amount for this pay is averaged over those officers in paygrades O-2 through O-4 with an 111X designator. Officers with other designators will receive this pay but the population identified encompasses the majority of the

TABLE 19  
SPECIAL WARFARE, OPERATIONS - TRAINING  
DESIGNATORS 118X AND 119X

Cost Element	O-1	O-2	O-3	O-4
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44
2. Retired Pay				
Accrual	7,976.03	10,645.04	13,529.40	16,369.93
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55
4. Basic Allowance				
For Quarters	2,615.44	3,153.96	3,990.86	5,037.78
5. Variable Housing				
Allowance	927.16	1,250.97	1,596.33	1,887.72
6. Basic Allowance				
For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances,				
Overseas	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00
9. Family Separation				
Allowance	48.88	48.88	48.88	48.88
10. Separation				
Payments	17.40	100.42	544.96	341.70
11. Experimental Pay	1.62	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00	0.00
13. Personal Money				
Allowance	0.00	0.00	0.00	0.00
14. Imminent Danger				
Pay	0.17	0.17	0.17	0.17
15. Foreign Language				
Proficiency Pay	0.00	0.00	0.00	0.00
16. Permanent Change of				
Station	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82
S1. Demolition Duty	538.01	538.01	538.01	538.01
S2. Diving Duty	2,929.20	2,929.20	2,929.20	2,292.20
TOTAL 118X & 119X COST	36,511.42	45,758.02	56,544.49	66,700.03
Officers 118X	42.00	1.00	3.00	0.00
Officers 119X	55.00	30.00	12.00	0.00



officers receiving this pay and to be more accurate would not change the total cost of an officer by more than one-half of one percent.

### **3. Career Sea Pay**

As described in the Aviation/Submarine Warfare Submodels career sea pay is paid to officers in paygrades O-1 through O-6, and is based on paygrade and length of sea service. An officer must accumulate three years of sea service before being eligible to collect career sea pay.

The career sea pay rates used in the Surface Warfare submodels are calculated by taking the MPN budgeted amount, by paygrade, and dividing it by the same paygrade population including the 111X, 112X, 131X, 132X, 61XX, 62XX, 63XX, 640X, 71XX, 72XX, 73XX, and 740X designators. These designators are most representative of those collecting career sea pay. It is realized that all officers with these designators do not collect career sea pay. There are also officers with other designators that do collect career sea pay. However, the amount in question is not material and to be more accurate would not change the total cost of an officer by more than one percent.

### **4. Premium Sea Pay**

As described in the Aviation/Submarine Warfare Submodels the premium sea pay rate is a flat rate. Premium sea pay is paid to officers who are entitled to career sea pay and who have served more than thirty-six consecutive months on sea duty. [Ref. 1: p. 27]

The rate used in the Surface Warfare submodels is calculated by taking the MPN budgeted amount for premium sea pay and dividing it by the population which includes the 111X, 112X, 131X, 132X, 61XX, 62XX, 63XX, 640X, 71XX, 72XX, 73XX, and 740X designators paygrades O-1 through O-6. These designators are most representative of those collecting premium sea pay. It is realized that all officers with these designators do not collect premium sea pay. There are also officers with other designators that do collect premium sea pay. However, the amount in question is not material and to be more accurate would not change the total cost of an officer by more than one-half of one percent.



TABLE 20  
MEDICAL CORPS  
DESIGNATOR 210X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Physicians Pay								
a. Variable Pay	0.00	0.00	5,000.00	8,833.00	7,667.00	6,333.00	1,000.00	1,000.00
b. Additional Pay	0.00	0.00	7,098.38	7,098.38	7,098.38	7,098.38	7,098.38	7,098.38
c. Board Certified Pay	0.00	0.00	914.52	914.52	914.52	914.52	914.52	914.52
d. Medical Incentive Pay	0.00	0.00	490.36	490.36	490.36	490.36	0.00	0.00
TOTAL 210X COST	33,044.21	42,290.81	66,580.54	80,569.08	91,915.10	106,183.86	113,370.39	127,169.38
Officers 210X	0.00	0.00	1,797.00	1,239.00	515.00	391.00	6.00	6.00

TABLE 21  
DENTAL CORPS  
DESIGNATOR 220X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Dentists Pay								
a. Variable Pay	0.00	0.00	1,000.00	4,000.00	5,000.00	3,333.00	1,000.00	1,000.00
b. Additional Pay	0.00	0.00	2,400.00	6,000.00	7,000.00	9,334.00	10,000.00	10,000.00
c. Board Certified Pay	0.00	0.00	287.63	287.63	287.63	287.63	287.63	287.63
d. Saved Pay	0.00	0.00	204.20	204.20	204.20	204.20	204.20	204.20
TOTAL 220X COST	33,044.21	42,290.81	56,969.11	73,724.65	88,236.67	104,506.43	115,849.32	129,648.31
Officers 220X	0.00	0.00	815.00	366.00	276.00	254.00	2.00	1.00

TABLE 22  
MEDICAL SERVICE CORPS  
DESIGNATOR 230X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
Sl. Optometrist Pay	0.00	0.00	73.26	73.26	73.26	73.26	73.26	73.26
TOTAL 230X COST	33,044.21	42,290.81	53,150.54	63,306.08	75,818.10	91,420.86	104,430.75	118,229.74
Officers 230X	225.00	369.00	881.00	576.00	296.00	97.00	1.00	0.00

TABLE 23  
SURFACE WARFARE  
DESIGNATOR 111X

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Responsibility Pay	0.00	0.00	0.00	0.00	464.38	464.38	0.00	0.00
S2. Flight Deck Duty Pay	0.00	182.72	182.72	182.72	0.00	0.00	0.00	0.00
S3. Career Sea Pay	431.99	306.32	421.65	714.24	725.62	536.57	0.00	0.00
S4. Sea Pay Premium	78.90	78.90	78.90	78.90	78.90	78.90	0.00	0.00
TOTAL 111X COST	33,555.10	42,858.75	53,760.55	64,208.68	77,013.74	92,427.45	104,357.49	118,156.48
Officers	17.00	978.00	3,022.00	1,752.00	1,232.00	681.00	30.00	30.00



TABLE 24  
LIMITED DUTY OFFICER - SURFACE WARFARE  
DESIGNATOR 61XX

Cost Element	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8-10
1. Basic Pay	16,194.99	21,614.30	27,470.86	33,238.44	40,488.62	50,727.27	60,992.80	68,698.80
2. Retired Pay								
Accrual	7,976.03	10,645.04	13,529.40	16,369.93	19,940.65	24,983.18	30,038.95	33,834.16
3. Social Security Tax	1,157.94	1,545.42	1,964.17	2,376.55	2,894.94	3,003.00	3,003.00	3,003.00
4. Basic Allowance For Quarters	2,615.44	3,153.96	3,990.86	5,037.78	5,859.73	5,598.52	3,693.71	3,693.71
5. Variable Housing Allowance	927.16	1,250.97	1,596.33	1,887.72	2,131.96	1,998.43	1,269.64	1,269.64
6. Basic Allowance For Subsistence	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44	1,312.44
7. Station Allowances, Overseas	437.89	437.89	437.89	437.89	437.89	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Family Separation Allowance	48.88	48.88	48.88	48.88	48.88	48.88	48.88	48.88
10. Separation Payments	17.40	100.42	544.96	341.70	448.24	1,056.50	1,380.31	3,255.33
11. Experimental Pay	1.62	1.62	1.62	1.62	1.62	1.62	0.00	0.00
12. Toxic Material Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Personal Money Allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	422.76
14. Imminent Danger Pay	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
15. Foreign Language Proficiency Pay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16. Permanent Change of Station	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90	16.90	16.90	16.90	16.90	16.90
OFFICER BILLET COST	33,044.21	42,290.81	53,077.28	63,232.82	75,744.84	91,347.60	104,357.49	118,156.48
S1. Career Sea Pay	431.99	306.32	421.65	714.24	725.62	536.57	0.00	0.00
S2. Premium Sea Pay	78.90	78.90	78.90	78.90	78.90	78.90	0.00	0.00
TOTAL 61XX COST	33,555.10	42,676.03	53,577.83	64,025.96	76,549.36	91,963.07	104,357.49	118,156.48
Officers 62XX	237.00	275.00	623.00	295.00	35.00	1.00	0.00	0.00



TABLE 25  
WARRANT - SURFACE WARFARE  
DESIGNATOR 71XX

Cost Element	W-2	W-3	W-4
1. Basic Pay	23,040.66	26,661.20	32,072.11
2. Retired Pay			
Accrual	11,347.53	13,130.64	15,795.51
3. Social Security Tax	1,647.41	1,906.28	2,293.16
4. Basic Allowance			
For Quarters	3,414.91	4,516.83	4,403.38
5. Variable Housing			
Allowance	1,587.22	1,919.98	1,601.65
6. Basic Allowance For			
Subsistence	1,312.44	1,312.44	1,312.44
7. Station Allowances,			
Overseas	437.89	437.89	437.89
8. Uniform Allowance	174.55	0.00	0.00
9. Family Separation			
Allowances	48.88	48.88	48.88
10. Separation Payments	26.76	267.81	815.75
11. Experimental Pay	1.62	1.62	1.62
12. Toxic Material Pay	0.00	0.00	0.00
13. Personal Money			
Allowance	0.00	0.00	0.00
14. Imminent Danger			
Pay	0.17	0.17	0.17
15. Foreign Language			
Proficiency Pay	0.00	0.00	0.00
16. Permanent Change of			
Station	2,162.80	2,162.80	2,162.80
17. Other Indirect Costs	16.90	16.90	16.90
OFFICER BILLET COST	45,219.74	52,383.44	60,962.26
S1. Career Sea Pay	1,336.75	1,011.27	859.82
S2. Premium Sea Pay	78.90	78.90	78.90
TOTAL 71XX COST	46,635.39	53,473.61	61,900.98
Officers	516.00	336.00	393.00

### **III. CONCLUSIONS AND RECOMMENDATIONS**

#### **A. SUMMARY**

Chapter I provides a general discussion and the background of costing models, followed by a discussion of the objectives of this thesis, the scope, limitations, and assumptions applied, the literature review, and finally thesis organization. Chapter II discusses the construction of the basic Officer Billet Cost Model (OBCM) and twenty-four submodels. First, it provides a description of the components of the basic OBCM followed by a discussion of how each component of the basic OBCM was formulated, including the underlying assumptions used in each application. Secondly, it discusses the twenty-four individual submodels including descriptions of the elements of the MPN components, followed by a discussion of how each element was applied to each submodel. Also discussed are the underlying assumptions used in each application. Chapter III provides the conclusions and recommendations for the thesis including a summary of the thesis, the conclusions drawn from the model, recommendations and limitations regarding implementation and future use of the basic OBCM and twenty-four submodels, and recommendations for additional theses in this area of study.

Appendix A provides the equations by paygrade of how the specific values were constructed in the basic OBCM. This is followed by the equations by paygrade and designator of how the specific values were constructed in the Aviation Warfare Submodels, the Submarine Warfare Submodels, the Special Warfare/Operations Submodels, the Medical Corps Submodel, the Dental Corps Submodel, the Medical Service Corps Submodel, and the Surface Warfare Submodels. Appendix B provides a list of abbreviations and acronyms used in the construction of the basic OBCM and twenty-four submodels and their definitions. Finally, Appendix C provides a definition and source of dollar values used for each separate element used in the equations for the basic OBCM and twenty-four submodels.

#### **B. CONCLUSIONS**

In answer to the research question, "Can manpower dollars be allocated in such a way as to more accurately reflect the cost of officers for all individual billets in each of the Navy's programs?" this thesis presents the basic Officer Billet Cost Model (OBCM) and twenty-four submodels.

Currently, personnel costing employs an average cost figure for officer personnel. This average cost figure does not supply precise data for the budgeting and planning of billets and personnel. The average cost method values an Admiral exactly the same as an Ensign. Likewise, the cost of a nuclear submariner or medical doctor is exactly the same as the cost of a chaplain or lawyer.

This thesis presents the basic OBCM and twenty-four submodels which reflect a more precise cost estimate for individual officers or groups of officers based on their time in service, area of specialization and qualifications. The basic OBCM is presented showing the variation in officer costs by paygrade. Further, where pay elements could be directly assigned to a group of officers by designator twenty-four individual submodels were constructed showing variations in these officer's costs by both paygrade and designator. As found in the basic OBCM the cost to employ an Admiral (O-10) is \$118,156.48, and the cost to employ an Ensign (O-1) is \$33,044.21 demonstrating a wide variation in costs. Likewise, the cost of a medical doctor (O-5) is \$91,915.10 and the cost of a lawyer (O-5) is \$75,744.84, again demonstrating a wide variation in costs based on areas of specialization. Therefore, the basic OBCM and twenty-four submodel allocations reflect more accurately the cost of quality and special skills required of officers in the Navy than the current average cost method.

## **C. RECOMMENDATIONS AND LIMITATIONS**

### **1. Recommendation One**

Implement the Officer Billet Cost Model as constructed.

### **2. Recommendation Two**

Reevaluation and review of this model is recommended on at least an annual basis, at the passage of each annual appropriations bill. The reevaluation should update the underlying assumptions as they may change and ensure that the cost figures used in the OBCM and twenty-four submodels are updated.

### **3. Limitations**

The whole model can be enhanced and further refined, more accurately identifying individual billet costs. Specifically, some of the MPN components which have been averaged across all officers (e.g., Station Allowances, Overseas, Family Separation Allowances, Experimental Pay, Toxic Material Pay) can be further broken out with use of categories in addition to paygrade and designator. In other cases elements of some of the MPN components have been averaged across all officers in the twenty-four submodels (e.g., elements of Physicians Pay, elements of Dentist's Pay,

Optometrist's Pay, Flight Deck Duty Pay, and Sea Pay) because the amounts are relatively small and to be more accurate would not change the total cost of an individual officer to any significant degree. This refinement of costs and greater accuracy is not necessary since the amounts in question are not material.

#### **D. RECOMMENDATIONS FOR ADDITIONAL THESES**

While interviewing personnel in the Navy Military Personnel Command, OP-013, to determine the feasibility of developing the OBCM, numerous negative factors were mentioned pertaining to the implementation of the OBCM. While these factors did not deter the development of the OBCM, they did provide insight for future theses to aid in the implementation of the basic OBCM and twenty-four submodels and an Enlisted Billet Cost Model when developed. Numerous data bases are used to obtain the information used in developing the average cost figure currently utilized. The basic OBCM and twenty-four submodels was developed using the same basic information. These data bases are independent of one another and access to this information is difficult to obtain. Currently, there are three separate offices involved in developing the average cost figure projecting future needs or end requirements based on data compiled in individual data banks. In some cases these data were obtained from other DON offices with different computer systems resulting in data being input separately. The compiled information is then routed through OP-80 where it is analyzed to arrive at the current/projected figures that will be used. OP-80 does not have access to any of the individual data banks and must rely on the individual offices to submit their inputs in a timely fashion.

##### **1. Recommendation One**

Develop an Enlisted Billet Cost Model, applying each component of the Military Personnel, Navy (MPN) account by paygrade and rate to determine a more precise accounting for enlisted personnel is recommended.

##### **2. Recommendation Two**

Study the feasibility of developing a data base management system tying the individual data bases together at the OP-80 level, or networking of these computer systems to provide real-time access and to aid the Government in effectively utilizing these data as well as increasing office productivity.

##### **3. Recommendation Three**

Develop a computer program for using the basic OBCM and twenty-four submodels, to provide access to current information, and for ease of application. Computer/software standardization may be necessary.



## **APPENDIX A**

### **MODEL EQUATIONS**

#### **1. DESCRIPTION OF THE OFFICER BILLET COST MODEL**

To arrive at the officer billet cost for each paygrade, various assumptions are applied depending on the pay category and paygrade under consideration. Tables 26 through 36 provide the formulas used in calculating the officer billet cost for each paygrade. Acronyms and abbreviations used and their definitions are found in Appendix B. Equation components, their source, and definitions are found in Appendix C.

#### **2. DESCRIPTIONS OF THE SUBMODELS**

##### **a. Aviation Warfare Submodels**

Tables 37 through 43 provide the equations used in calculating total officer billet cost by designator for the Aviation Warfare Submodels.

##### **b. Submarine Warfare Submodels**

Tables 44 through 49 provide the equations used in calculating total officer billet cost by designator for the Submarine Warfare Submodels.

##### **c. Special Warfare/Operations Submodels**

Tables 50 through 52 provide the equations used in calculating total officer billet cost by designator for the Special Warfare/Operations Submodels.

##### **d. Medical Corps Submodel**

Table 53 provides the equations used in calculating total officer billet cost for the Medical Corps Submodel designator 210X.

##### **e. Dental Corps Submodel**

Table 54 provides the equations used in calculating total officer billet cost for the Dental Corps Submodel designator 220X.

##### **f. Medical Service Corps Submodel**

Table 55 provides the equations used in calculating total officer billet cost for the Medical Service Corps Submodel designator 230X.

##### **g. Surface Warfare Submodels**

Tables 56 through 58 provide the equations used in calculating total officer billet cost by designator for the Surface Warfare Submodels.



TABLE 26  
OFFICER BILLET COST MODEL DESCRIPTION FOR O-1

1. BP = BP Ave Rate for O-1s
2. RPA = BP Ave Rate for O-1s \* Normal Cost %
3. SST = BP Ave Rate for O-1s \* CY % Rate
4. BAQ = {(Dep BAQ Rate for O-1s \* O-1s eligible) +  
(W/O Dep BAQ Rate for O-1s \* O-1s eligible) +  
(PA Rate for O-1s \* O-1s eligible) +  
(SFH Rate for O-1s \* O-1s eligible)} /  $N_{O-1}$
5. VHA = (VHA Ave Rate for O-1s \* O-1s eligible) /  $N_{O-1}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = MPN Bud Amt for UA / ( $N_{O-1} + N_{W-2}$ )
9. FSA = MPN Bud Amt for FSA / N
10. SP = {(LSTL Rate for O-1s \* O-1s eligible) /  $N_{O-1}$ } +  
(MPN Bud Amt for SP-D / N)
11. EXP = MPN Bud Amt for EXP / N - ( $N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10}$ )
12. TMP = MPN Bud Amt for TMP / N - ( $N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10}$ )
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS = {((MPN Bud Amt for  $AT_O$  + MPN Bud Amt for  $TT_O$  +  
MPN Bud Amt for  $OT_O$  + MPN Bud Amt for  $RT_O$  +  
MPN Bud Amt for  $ST_O$  + MPN Bud Amt for  $TOU_O$ ) / N) +  
((MPN Bud Amt for NTS + MPN Bud Amt for TLE) /  
( $N + N_E$ ))}
17. OIC = {(MPN Bud Amt for DG / N) + ((MPN Bud Amt for SB +  
MPN Bud Amt for EB) / ( $N + N_E$ )))}

TABLE 27  
OFFICER BILLET COST MODEL DESCRIPTION FOR O-2

1. BP = BP Ave Rate for O-2s
2. RPA = BP Ave Rate for O-2s \* Normal Cost %
3. SST = BP Ave Rate for O-2s \* CY % Rate
4. BAQ = {(Dep BAQ Rate for O-2s \* O-2s eligible) +  
(W/O Dep BAQ Rate for O-2s \* O-2s eligible) +  
(PA Rate for O-2s \* O-2s eligible) +  
(SFH Rate for O-2s \* O-2s eligible)} /  $N_{O-2}$
5. VHA = (VHA Ave Rate for O-2s \* O-2s eligible) /  $N_{O-2}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = Not Applicable
9. FSA = MPN Bud Amt for FSA / N
10. SP = {(LSTL Rate for O-2s \* O-2s eligible) /  $N_{O-2}$ } +  
(MPN Bud Amt for SP-D / N)
11. EXP = MPN Bud Amt for EXP / N - ( $N_{O-7}$  +  $N_{O-8}$  +  $N_{O-9}$  +  
 $N_{O-10}$ )
12. TMP = MPN Bud Amt for TMP / N - ( $N_{O-7}$  +  $N_{O-8}$  +  $N_{O-9}$  +  
 $N_{O-10}$ )
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS = {((MPN Bud Amt for  $AT_O$  + MPN Bud Amt for  $TT_O$  +  
MPN Bud Amt for  $OT_O$  + MPN Bud Amt for  $RT_O$  +  
MPN Bud Amt for  $ST_O$  + MPN Bud Amt for  $TOU_O$ ) / N) +  
((MPN Bud Amt for NTS + MPN Bud Amt for TLE) /  
(N +  $N_E$ ))}
17. OIC = {(MPN Bud Amt for DG / N) + ((MPN Bud Amt for SB +  
MPN Bud Amt for EB) / (N +  $N_E$ ))}

TABLE 28  
OFFICER BILLET COST MODEL DESCRIPTION FOR O-3

1. BP = BP Ave Rate for O-3s
2. RPA = BP Ave Rate for O-3s \* Normal Cost %
3. SST = BP Ave Rate for O-3s \* CY % Rate
4. BAQ = {(Dep BAQ Rate for O-3s \* O-3s eligible) +  
(W/O Dep BAQ Rate for O-3s \* O-3s eligible) +  
(PA Rate for O-3s \* O-3s eligible) +  
(SFH Rate for O-3s \* O-3s eligible)} /  $N_{O-3}$
5. VHA = (VHA Ave Rate for O-3s \* O-3s eligible) /  $N_{O-3}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = Not Applicable
9. FSA = MPN Bud Amt for FSA / N
10. SP = {(LSTL Rate for O-3s \* O-3s eligible) /  $N_{O-3}$ } +  
(MPN Bud Amt for LSP-R / ( $N_{O-3} + N_{O-4}$ )) +  
(MPN Bud Amt for FOP-SP / ( $N_{O-3} + N_{O-4}$ )) +  
(MPN Bud Amt for SP-D / N)
11. EXP = MPN Bud Amt for EXP / N - ( $N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10}$ )
12. TMP = MPN Bud Amt for TMP / N - ( $N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10}$ )
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS = {((MPN Bud Amt for  $AT_O$  + MPN Bud Amt for  $TT_O$  +  
MPN Bud Amt for  $OT_O$  + MPN Bud Amt for  $RT_O$  +  
MPN Bud Amt for  $ST_O$  + MPN Bud Amt for  $TOU_O$ ) / N) +  
((MPN Bud Amt for NTS + MPN Bud Amt for TLE) /  
(N +  $N_E$ ))}
17. OIC = {(MPN Bud Amt for DG / N) + ((MPN Bud Amt for SB +  
MPN Bud Amt for EB) / (N +  $N_E$ )))}

TABLE 29  
OFFICER BILLET COST MODEL DESCRIPTION FOR O-4

1. BP = BP Ave Rate for O-4s
2. RPA = BP Ave Rate for O-4s \* Normal Cost %
3. SST = BP Ave Rate for O-4s \* CY % Rate
4. BAQ = {(Dep BAQ Rate for O-4s \* O-4s eligible) +  
(W/O Dep BAQ Rate for O-4s \* O-4s eligible) +  
(PA Rate for O-4s \* O-4s eligible) +  
(SFH Rate for O-4s \* O-4s eligible)} / N<sub>O-4</sub>
5. VHA = (VHA Ave Rate for O-4s \* O-4s eligible) / N<sub>O-4</sub>
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = Not Applicable
9. FSA = MPN Bud Amt for FSA / N
10. SP = {(LSTL Rate for O-4s \* O-4s eligible) / N<sub>O-4</sub>} +  
(MPN Bud Amt for LSP-R / (N<sub>O-3</sub> + N<sub>O-4</sub>)) +  
(MPN Bud Amt for FOP-SP / (N<sub>O-3</sub> + N<sub>O-4</sub>)) +  
(MPN Bud Amt for SP-D / N)
11. EXP = MPN Bud Amt for EXP / N - (N<sub>O-7</sub> + N<sub>O-8</sub> + N<sub>O-9</sub> +  
N<sub>O-10</sub>)
12. TMP = MPN Bud Amt for TMP / N - (N<sub>O-7</sub> + N<sub>O-8</sub> + N<sub>O-9</sub> +  
N<sub>O-10</sub>)
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS = {((MPN Bud Amt for AT<sub>O</sub> + MPN Bud Amt for TT<sub>O</sub> +  
MPN Bud Amt for OT<sub>O</sub> + MPN Bud Amt for RT<sub>O</sub> +  
MPN Bud Amt for ST<sub>O</sub> + MPN Bud Amt for TOU<sub>O</sub>) / N) +  
((MPN Bud Amt for NTS + MPN Bud Amt for TLE) /  
(N + N<sub>E</sub>))}
17. OIC = {(MPN Bud Amt for DG / N) + ((MPN Bud Amt for SB +  
MPN Bud Amt for EB) / (N + N<sub>E</sub>))}

TABLE 30  
OFFICER BILLET COST MODEL DESCRIPTION FOR O-5

1. BP = BP Ave Rate for O-5s
2. RPA = BP Ave Rate for O-5s \* Normal Cost %
3. SST = BP Ave Rate for O-5s \* CY % Rate
4. BAQ =  $\{(\text{Dep BAQ Rate for O-5s} * \text{O-5s eligible}) + (\text{W/O Dep BAQ Rate for O-5s} * \text{O-5s eligible}) + (\text{PA Rate for O-5s} * \text{O-5s eligible}) + (\text{SFH Rate for O-5s} * \text{O-5s eligible})\} / N_{O-5}$
5. VHA =  $(\text{VHA Ave Rate for O-5s} * \text{O-5s eligible}) / N_{O-5}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = Not Applicable
9. FSA = MPN Bud Amt for FSA / N
10. SP =  $\{(\text{LSTL Rate for O-5s} * \text{O-5s eligible}) / N_{O-5}\} + (\text{MPN Bud Amt for SP-D} / N)$
11. EXP =  $\text{MPN Bud Amt for EXP} / N - (N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10})$
12. TMP =  $\text{MPN Bud Amt for TMP} / N - (N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10})$
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS =  $\{((\text{MPN Bud Amt for AT}_O + \text{MPN Bud Amt for TT}_O + \text{MPN Bud Amt for OT}_O + \text{MPN Bud Amt for RT}_O + \text{MPN Bud Amt for ST}_O + \text{MPN Bud Amt for TOU}_O) / N) + ((\text{MPN Bud Amt for NTS} + \text{MPN Bud Amt for TLE}) / (N + N_E))\}$
17. OIC =  $\{(\text{MPN Bud Amt for DG} / N) + ((\text{MPN Bud Amt for SB} + \text{MPN Bud Amt for EB}) / (N + N_E))\}$



TABLE 31  
OFFICER BILLET COST MODEL DESCRIPTION FOR O-6

1. BP = BP Ave Rate for O-6s
2. RPA = BP Ave Rate for O-6s \* Normal Cost %
3. SST = BP Ave Rate for O-6s \* CY % Rate
4. BAQ = {(Dep BAQ Rate for O-6s \* O-6s eligible) +  
(W/O Dep BAQ Rate for O-6s \* O-6s eligible) +  
(PA Rate for O-6s \* O-6s eligible) +  
(SFH Rate for O-6s \* O-6s eligible)} /  $N_{O-6}$
5. VHA = (VHA Ave Rate for O-6s \* O-6s eligible) /  $N_{O-6}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = Not Applicable
9. FSA = MPN Bud Amt for FSA / N
10. SP = {(LSTL Rate for O-6s \* O-6s eligible) /  $N_{O-6}$ } +  
(MPN Bud Amt for SP-D / N)
11. EXP = MPN Bud Amt for EXP / N - ( $N_{O-7}$  +  $N_{O-8}$  +  $N_{O-9}$  +  
 $N_{O-10}$ )
12. TMP = MPN Bud Amt for TMP / N - ( $N_{O-7}$  +  $N_{O-8}$  +  $N_{O-9}$  +  
 $N_{O-10}$ )
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS = {((MPN Bud Amt for  $AT_O$  + MPN Bud Amt for  $TT_O$  +  
MPN Bud Amt for  $OT_O$  + MPN Bud Amt for  $RT_O$  +  
MPN Bud Amt for  $ST_O$  + MPN Bud Amt for  $TOU_O$ ) / N) +  
((MPN Bud Amt for NTS + MPN Bud Amt for TLE) /  
(N +  $N_E$ ))}
17. OIC = {(MPN Bud Amt for DG / N) + ((MPN Bud Amt for SB +  
MPN Bud Amt for EB) / (N +  $N_E$ )))}

TABLE 32  
OFFICER BILLET COST MODEL DESCRIPTION FOR O-7

1. BP = BP Ave Rate for O-7s
2. RPA = BP Ave Rate for O-7s \* Normal Cost %
3. SST = BP Ave Rate for O-7s \* CY % Rate
4. BAQ = {(Dep BAQ Rate for FOs \* FOs eligible) +  
(W/O Dep BAQ Rate for FOs \* FOs eligible) +  
(PA Rate for FOs \* FOs eligible)} /  $N_{FO}$
5. VHA = (VHA Ave Rate for FOs \* FOs eligible) /  $N_{FO}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = Not Applicable
9. FSA = MPN Bud Amt for FSA / N
10. SP = {(LSTL Rate for O-7s \* O-7s eligible) /  $N_{O-7}$ } +  
(MPN Bud Amt for SP-D / N)
11. EXP = Not Applicable
12. TMP = Not Applicable
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS = {((MPN Bud Amt for  $AT_O$  + MPN Bud Amt for  $TT_O$  +  
MPN Bud Amt for  $OT_O$  + MPN Bud Amt for  $RT_O$  +  
MPN Bud Amt for  $ST_O$  + MPN Bud Amt for  $TOU_O$ ) / N) +  
((MPN Bud Amt for NTS + MPN Bud Amt for TLE) /  
(N +  $N_E$ ))}
17. OIC = {(MPN Bud Amt for DG / N) + ((MPN Bud Amt for SB +  
MPN Bud Amt for EB) / (N +  $N_E$ ))}

TABLE 33  
OFFICER BILLET COST MODEL DESCRIPTION FOR O-8-10

1. BP = BP Ave Rate for O-8-10s
2. RPA = BP Ave Rate for O-8-10s \* Normal Cost %
3. SST = BP Ave Rate for O-8-10s \* CY % Rate
4. BAQ =  $\{((\text{Dep BAQ Rate for FOs} * \text{FOs eligible}) + (\text{W/O Dep BAQ Rate for FOs} * \text{FOs eligible}) + (\text{PA Rate for FOs} * \text{FOs eligible})) / N_{\text{FO}}\}$
5. VHA =  $(\text{VHA Ave Rate for FOs} * \text{FOs eligible}) / N_{\text{FO}}$
6. BAS = Statutory Rate
7. SAO =  $\text{MPN Bud Amt for SAO} / N$
8. UA = Not Applicable
9. FSA =  $\text{MPN Bud Amt for FSA} / N$
10. SP =  $\{((\text{LSTL Rate for O-8s} * \text{O-8s eligible}) + (\text{LSTL Rate for O-9s} * \text{O-9s eligible}) + (\text{LSTL Rate for O-10s} * \text{O-10s eligible})) / (N_{\text{O-8}} + N_{\text{O-9}} + N_{\text{O-10}})) + (\text{MPN Bud Amt for SP-D} / N)\}$
11. EXP = Not Applicable
12. TMP = Not Applicable
13. PMA =  $\text{MPN Bud Amt for PMA} / N_{\text{O-8-10}}$
14. IDP =  $\text{MPN Bud Amt for IDP} / N$
15. FLPP =  $\text{MPN Bud Amt for FLPP} / N$
16. PCS =  $\{((\text{MPN Bud Amt for AT}_O + \text{MPN Bud Amt for TT}_O + \text{MPN Bud Amt for OT}_O + \text{MPN Bud Amt for RT}_O + \text{MPN Bud Amt for ST}_O + \text{MPN Bud Amt for TOU}_O) / N) + ((\text{MPN Bud Amt for NTS} + \text{MPN Bud Amt for TLE}) / (N + N_E))\}$
17. OIC =  $\{((\text{MPN Bud Amt for DG} / N) + ((\text{MPN Bud Amt for SB} + \text{MPN Bud Amt for EB}) / (N + N_E)))\}$

TABLE 34  
OFFICER BILLET COST MODEL DESCRIPTION FOR W-2

1. BP = BP Ave Rate for W-2s
2. RPA = BP Ave Rate for W-2s \* Normal Cost %
3. SST = BP Ave Rate for W-2s \* CY % Rate
4. BAQ =  $\{(\text{Dep BAQ Rate for W-2s} * \text{W-2s eligible}) +$   
 $(\text{W/O Dep BAQ Rate for W-2s} * \text{W-2s eligible}) +$   
 $(\text{PA Rate for W-2s} * \text{W-2s eligible}) +$   
 $(\text{SFH Rate for W-2s} * \text{W-2s eligible})\} / N_{W-2}$
5. VHA =  $(\text{VHA Ave Rate for W-2s} * \text{W-2s eligible}) / N_{W-2}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = MPN Bud Amt for UA /  $(N_{O-1} + N_{W-2})$
9. FSA = MPN Bud Amt for FSA / N
10. SP =  $\{(\text{LSTL Rate for W-2s} * \text{W-2s eligible}) / N_{W-2}\} +$   
 $(\text{MPN Bud Amt for SP-D} / N)$
11. EXP = MPN Bud Amt for EXP /  $N - (N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10})$
12. TMP = MPN Bud Amt for TMP /  $N - (N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10})$
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS =  $\{((\text{MPN Bud Amt for AT}_O + \text{MPN Bud Amt for TT}_O +$   
 $\text{MPN Bud Amt for OT}_O + \text{MPN Bud Amt for RT}_O +$   
 $\text{MPN Bud Amt for ST}_O + \text{MPN Bud Amt for TOU}_O) / N) +$   
 $((\text{MPN Bud Amt for NTS} + \text{MPN Bud Amt for TLE}) /$   
 $(N + N_E))\}$
17. OIC =  $\{(\text{MPN Bud Amt for DG} / N) + ((\text{MPN Bud Amt for SB} +$   
 $\text{MPN Bud Amt for EB}) / (N + N_E))\}$

TABLE 35  
OFFICER BILLET COST MODEL DESCRIPTION FOR W-3

1. BP = BP Ave Rate for W-3s
2. RPA = BP Ave Rate for W-3s \* Normal Cost %
3. SST = BP Ave Rate for W-3s \* CY % Rate
4. BAQ =  $\{((\text{Dep BAQ Rate for W-3s} * \text{W-3s eligible}) + (\text{W, O Dep BAQ Rate for W-3s} * \text{W-3s eligible}) + (\text{PA Rate for W-3s} * \text{W-3s eligible}) + (\text{SFH Rate for W-3s} * \text{W-3s eligible})) / N_{W-3}$
5. VHA =  $(\text{VHA Ave Rate for W-3s} * \text{W-3s eligible}) / N_{W-3}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = Not Applicable
9. FSA = MPN Bud Amt for FSA / N
10. SP =  $\{((\text{LSTL Rate for W-3s} * \text{W-3s eligible}) / N_{W-3}) + (\text{MPN Bud Amt for SP-D} / N)$
11. EXP =  $\text{MPN Bud Amt for EXP} / N - (N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10})$
12. TMP =  $\text{MPN Bud Amt for TMP} / N - (N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10})$
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS =  $\{((\text{MPN Bud Amt for } AT_O + \text{MPN Bud Amt for } TT_O + \text{MPN Bud Amt for } OT_O + \text{MPN Bud Amt for } RT_O + \text{MPN Bud Amt for } ST_O + \text{MPN Bud Amt for } TOU_O) / N) + ((\text{MPN Bud Amt for NTS} + \text{MPN Bud Amt for TLE}) / (N + N_E))\}$
17. OIC =  $\{((\text{MPN Bud Amt for DG} / N) + ((\text{MPN Bud Amt for SB} + \text{MPN Bud Amt for EB}) / (N + N_E)))\}$



TABLE 36  
OFFICER BILLET COST MODEL DESCRIPTION FOR W-4

1. BP = BP Ave Rate for W-4s
2. RPA = BP Ave Rate for W-4s \* Normal Cost %
3. SST = BP Ave Rate for W-4s \* CY % Rate
4. BAQ =  $\{(\text{Dep BAQ Rate for W-4s} * \text{W-4s eligible}) + (\text{W/O Dep BAQ Rate for W-4s} * \text{W-4s eligible}) + (\text{PA Rate for W-4s} * \text{W-4s eligible}) + (\text{SFH Rate for W-4s} * \text{W-4s eligible})\} / N_{W-4}$
5. VHA =  $(\text{VHA Ave Rate for W-4s} * \text{W-4s eligible}) / N_{W-4}$
6. BAS = Statutory Rate
7. SAO = MPN Bud Amt for SAO / N
8. UA = Not Applicable
9. FSA = MPN Bud Amt for FSA / N
10. SP =  $\{(\text{LSTL Rate for W-4s} * \text{W-4s eligible}) / N_{W-4}\} + (\text{MPN Bud Amt for SP-D} / N)$
11. EXP =  $\text{MPN Bud Amt for EXP} / N - (N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10})$
12. TMP =  $\text{MPN Bud Amt for TMP} / N - (N_{O-7} + N_{O-8} + N_{O-9} + N_{O-10})$
13. PMA = Not Applicable
14. IDP = MPN Bud Amt for IDP / N
15. FLPP = MPN Bud Amt for FLPP / N
16. PCS =  $\{((\text{MPN Bud Amt for AT}_O + \text{MPN Bud Amt for TT}_O + \text{MPN Bud Amt for OT}_O + \text{MPN Bud Amt for RT}_O + \text{MPN Bud Amt for ST}_O + \text{MPN Bud Amt for TOU}_O) / N) + ((\text{MPN Bud Amt for NTS} + \text{MPN Bud Amt for TLE}) / (N + N_E))\}$
17. OIC =  $\{(\text{MPN Bud Amt for DG} / N) + ((\text{MPN Bud Amt for SB} + \text{MPN Bud Amt for EB}) / (N + N_E))\}$

TABLE 37  
AVIATION WARFARE SUBMODEL - PILOTS (131X)

S1. Flying Duty - Paygrades O-1 through O-6

a. ACIP

$$O-1 \quad 125.00 * 12 = 1,500.00$$

$$O-2 \quad ((156.00 * 1/2) + (188.00 * 1/2)) * 12 = 2,064.00$$

$$O-3 \quad ((400.00 * 3/5) + (206.00 * 2/5)) * 12 = 3,869.00$$

$$O-4 \quad 400.00 * 12 = 4,800.00$$

$$O-5 \quad ((400.00 * 3/6) + (370.00 * 2/6) + (340.00 * 1/6)) * 12 = 4,560.00$$

$$O-6 \quad ((340.00 * 1/3) + (310.00 * 2/3)) * 12 = 3,840.00$$

b. Non-crew - Paygrades O-5 and O-6

$$\text{MPN Bud Amt for NC} / (N(\text{AWP})_{O-5} + N(\text{AWP})_{O-6} + N(\text{AWN})_{O-5} + N(\text{AWN})_{O-6})$$

c. AOCP - Paygrades O-3 through O-6

$$\text{MPN Bud Amt for AOCP - Pilots} / N(\text{AWP})_{O-3} + N(\text{AWP})_{O-4}$$

S2. Career Sea Pay - Paygrades O-1 through O-6

$$O-1 \quad \text{MPN Bud Amt for SEA}_{O-1} / (N(\text{SUR})_{O-1} + N(\text{SUB})_{O-1} + N(\text{AWP})_{O-1} + N(\text{AWN})_{O-1} + N(\text{SUL})_{O-1} + N(\text{SWL})_{O-1} + N(\text{AWL})_{O-1} + N(\text{NPL})_{O-1})$$

$$O-2 \quad \text{MPN Bud Amt for SEA}_{O-2} / (N(\text{SUR})_{O-2} + N(\text{SUB})_{O-2} + N(\text{AWP})_{O-2} + N(\text{AWN})_{O-2} + N(\text{SUL})_{O-2} + N(\text{SWL})_{O-2} + N(\text{AWL})_{O-2} + N(\text{NPL})_{O-2})$$

$$O-3 \quad \text{MPN Bud Amt for SEA}_{O-3} / (N(\text{SUR})_{O-3} + N(\text{SUB})_{O-3} + N(\text{AWP})_{O-3} + N(\text{AWN})_{O-3} + N(\text{SUL})_{O-3} + N(\text{SWL})_{O-3} + N(\text{AWL})_{O-3} + N(\text{NPL})_{O-3})$$

$$O-4 \quad \text{MPN Bud Amt for SEA}_{O-4} / (N(\text{SUR})_{O-4} + N(\text{SUB})_{O-4} + N(\text{AWP})_{O-4} + N(\text{AWN})_{O-4} + N(\text{SUL})_{O-4} + N(\text{SWL})_{O-4} + N(\text{AWL})_{O-4} + N(\text{NPL})_{O-4})$$

$$O-5 \quad \text{MPN Bud Amt for SEA}_{O-5} / (N(\text{SUR})_{O-5} + N(\text{SUB})_{O-5} + N(\text{AWP})_{O-5} + N(\text{AWN})_{O-5} + N(\text{SUL})_{O-5} + N(\text{SWL})_{O-5} + N(\text{AWL})_{O-5} + N(\text{NPL})_{O-5})$$

$$O-6 \quad \text{MPN Bud Amt for SEA}_{O-6} / (N(\text{SUR})_{O-6} + N(\text{SUB})_{O-6} + N(\text{AWP})_{O-6} + N(\text{AWN})_{O-6} + N(\text{SUL})_{O-6} + N(\text{SWL})_{O-6} + N(\text{AWL})_{O-6} + N(\text{NPL})_{O-6})$$

S3. Premium Sea Pay - Paygrades O-1 through O-6

$$\text{MPN Bud Amt for PSEA} / \{N(\text{SUR}) + (N(\text{SUB}) - N(\text{SUB})_{FO}) + N(\text{AWP}) + N(\text{AWN}) + N(\text{SUL}) + N(\text{SWL}) + N(\text{AWL}) + N(\text{NPL}) + N(\text{SUW}) + N(\text{SWW}) + N(\text{AWW}) + N(\text{NPW})\}$$

TABLE 38  
AVIATION WARFARE SUBMODEL - NFO (132X)

S1. Flying Duty - Paygrades O-1 through O-6

a. ACIP

$$\text{O-1 } 125.00 * 12 = 1,500.00$$

$$\text{O-2 } ((156.00 * 1/2) + (188.00 * 1/2)) * 12 = 2,064.00$$

$$\text{O-3 } ((400.00 * 3/5) + (206.00 * 2/5)) * 12 = 3,869.00$$

$$\text{O-4 } 400.00 * 12 = 4,800.00$$

$$\text{O-5 } ((400.00 * 3/6) + (370.00 * 2/6) + (340.00 * 1/6)) * 12 = 4,560.00$$

$$\text{O-6 } ((340.00 * 1/3) + (310.00 * 2/3)) * 12 = 3,840.00$$

b. Non-crew - Paygrades O-5 and O-6

$$\text{MPN Bud Amt for NC / (N(AWP)}_{\text{O-5}} + \text{N(AWP)}_{\text{O-6}} + \text{N(AWN)}_{\text{O-5}} + \text{N(AWN)}_{\text{O-6}})$$

c. AOCP - Paygrades O-3 through O-6

$$\text{MPN Bud Amt for AOCP - NFOs / N(AWN)}_{\text{O-3}} + \text{N(AWN)}_{\text{O-4}}$$

S2. Career Sea Pay - Paygrades O-1 through O-6

$$\text{O-1 MPN Bud Amt for SEA}_{\text{O-1}} / (\text{N(SUR)}_{\text{O-1}} + \text{N(SUB)}_{\text{O-1}} + \text{N(AWP)}_{\text{O-1}} + \text{N(AWN)}_{\text{O-1}} + \text{N(SUL)}_{\text{O-1}} + \text{N(SWL)}_{\text{O-1}} + \text{N(AWL)}_{\text{O-1}} + \text{N(NPL)}_{\text{O-1}})$$

$$\text{O-2 MPN Bud Amt for SEA}_{\text{O-2}} / (\text{N(SUR)}_{\text{O-2}} + \text{N(SUB)}_{\text{O-2}} + \text{N(AWP)}_{\text{O-2}} + \text{N(AWN)}_{\text{O-2}} + \text{N(SUL)}_{\text{O-2}} + \text{N(SWL)}_{\text{O-2}} + \text{N(AWL)}_{\text{O-2}} + \text{N(NPL)}_{\text{O-2}})$$

$$\text{O-3 MPN Bud Amt for SEA}_{\text{O-3}} / (\text{N(SUR)}_{\text{O-3}} + \text{N(SUB)}_{\text{O-3}} + \text{N(AWP)}_{\text{O-3}} + \text{N(AWN)}_{\text{O-3}} + \text{N(SUL)}_{\text{O-3}} + \text{N(SWL)}_{\text{O-3}} + \text{N(AWL)}_{\text{O-3}} + \text{N(NPL)}_{\text{O-3}})$$

$$\text{O-4 MPN Bud Amt for SEA}_{\text{O-4}} / (\text{N(SUR)}_{\text{O-4}} + \text{N(SUB)}_{\text{O-4}} + \text{N(AWP)}_{\text{O-4}} + \text{N(AWN)}_{\text{O-4}} + \text{N(SUL)}_{\text{O-4}} + \text{N(SWL)}_{\text{O-4}} + \text{N(AWL)}_{\text{O-4}} + \text{N(NPL)}_{\text{O-4}})$$

$$\text{O-5 MPN Bud Amt for SEA}_{\text{O-5}} / (\text{N(SUR)}_{\text{O-5}} + \text{N(SUB)}_{\text{O-5}} + \text{N(AWP)}_{\text{O-5}} + \text{N(AWN)}_{\text{O-5}} + \text{N(SUL)}_{\text{O-5}} + \text{N(SWL)}_{\text{O-5}} + \text{N(AWL)}_{\text{O-5}} + \text{N(NPL)}_{\text{O-5}})$$

$$\text{O-6 MPN Bud Amt for SEA}_{\text{O-6}} / (\text{N(SUR)}_{\text{O-6}} + \text{N(SUB)}_{\text{O-6}} + \text{N(AWP)}_{\text{O-6}} + \text{N(AWN)}_{\text{O-6}} + \text{N(SUL)}_{\text{O-6}} + \text{N(SWL)}_{\text{O-6}} + \text{N(AWL)}_{\text{O-6}} + \text{N(NPL)}_{\text{O-6}})$$

S3. Premium Sea Pay - Paygrades O-1 through O-6

$$\text{MPN Bud Amt for PSEA / \{N(SUR) + (N(SUB) - N(SUB)}_{\text{FO}}) + \text{N(AWP)} + \text{N(AWN)} + \text{N(SUL)} + \text{N(SWL)} + \text{N(AWL)} + \text{N(NPL)} + \text{N(SUW)} + \text{N(SWW)} + \text{N(AWW)} + \text{N(NPW)}\}}$$

TABLE 39  
AVIATION WARFARE SUBMODEL - TRAIN (137X & 139X)

S1. Flying Duty - Paygrades O-1 through O-3

a. ACIP

O-1  $125.00 * 12 = 1,500.00$

O-2  $125.00 * 12 = 1,500.00$

O-3  $125.00 * 12 = 1,500.00$

TABLE 40  
AVIATION WARFARE SUBMODEL - LDO AVIATION (63XX)

S1. Career Sea Pay - Paygrades O-1 through O-6

O-1 MPN Bud Amt for SEA<sub>O-1</sub> / (N(SUR)<sub>O-1</sub> + N(SUB)<sub>O-1</sub> + N(AWP)<sub>O-1</sub> + N(AWN)<sub>O-1</sub> + N(SUL)<sub>O-1</sub> + N(SWL)<sub>O-1</sub> + N(AWL)<sub>O-1</sub> + N(NPL)<sub>O-1</sub>)

O-2 MPN Bud Amt for SEA<sub>O-2</sub> / (N(SUR)<sub>O-2</sub> + N(SUB)<sub>O-2</sub> + N(AWP)<sub>O-2</sub> + N(AWN)<sub>O-2</sub> + N(SUL)<sub>O-2</sub> + N(SWL)<sub>O-2</sub> + N(AWL)<sub>O-2</sub> + N(NPL)<sub>O-2</sub>)

O-3 MPN Bud Amt for SEA<sub>O-3</sub> / (N(SUR)<sub>O-3</sub> + N(SUB)<sub>O-3</sub> + N(AWP)<sub>O-3</sub> + N(AWN)<sub>O-3</sub> + N(SUL)<sub>O-3</sub> + N(SWL)<sub>O-3</sub> + N(AWL)<sub>O-3</sub> + N(NPL)<sub>O-3</sub>)

O-4 MPN Bud Amt for SEA<sub>O-4</sub> / (N(SUR)<sub>O-4</sub> + N(SUB)<sub>O-4</sub> + N(AWP)<sub>O-4</sub> + N(AWN)<sub>O-4</sub> + N(SUL)<sub>O-4</sub> + N(SWL)<sub>O-4</sub> + N(AWL)<sub>O-4</sub> + N(NPL)<sub>O-4</sub>)

O-5 MPN Bud Amt for SEA<sub>O-5</sub> / (N(SUR)<sub>O-5</sub> + N(SUB)<sub>O-5</sub> + N(AWP)<sub>O-5</sub> + N(AWN)<sub>O-5</sub> + N(SUL)<sub>O-5</sub> + N(SWL)<sub>O-5</sub> + N(AWL)<sub>O-5</sub> + N(NPL)<sub>O-5</sub>)

O-6 MPN Bud Amt for SEA<sub>O-6</sub> / (N(SUR)<sub>O-6</sub> + N(SUB)<sub>O-6</sub> + N(AWP)<sub>O-6</sub> + N(AWN)<sub>O-6</sub> + N(SUL)<sub>O-6</sub> + N(SWL)<sub>O-6</sub> + N(AWL)<sub>O-6</sub> + N(NPL)<sub>O-6</sub>)

S2. Premium Sea Pay - Paygrades O-1 through O-6

MPN Bud Amt for PSEA / {N(SUR) + (N(SUB) - N(SUB)<sub>FO</sub>) + N(AWP) + N(AWN) + N(SUL) + N(SWL) + N(AWL) + N(NPL) + N(SUW) + N(SWW) + N(AWW) + N(NPW)}

TABLE 41  
 AVIATION WARFARE SUBMODEL - LDO AVIATOR (630X)

S1. Flying Duty - Paygrades O-1 through O-4

a. ACIP

$$\text{O-1 } 125.00 * 12 = 1,500.00$$

$$\text{O-2 } ((156.00 * 1/2) + (188.00 * 1/2)) * 12 = 2,064.00$$

$$\text{O-3 } ((400.00 * 3/5) + (206.00 * 2/5)) * 12 = 3,869.00$$

$$\text{O-4 } 400.00 * 12 = 4,800.00$$

S2. Career Sea Pay - Paygrades O-1 through O-4

$$\begin{aligned} \text{O-1 MPN Bud Amt for SEA}_{\text{O-1}} / & (\text{N(SUR)}_{\text{O-1}} + \text{N(SUB)}_{\text{O-1}} + \\ & \text{N(AWP)}_{\text{O-1}} + \text{N(AWN)}_{\text{O-1}} + \text{N(SUL)}_{\text{O-1}} + \\ & \text{N(SWL)}_{\text{O-1}} + \text{N(AWL)}_{\text{O-1}} + \text{N(NPL)}_{\text{O-1}}) \end{aligned}$$

$$\begin{aligned} \text{O-2 MPN Bud Amt for SEA}_{\text{O-2}} / & (\text{N(SUR)}_{\text{O-2}} + \text{N(SUB)}_{\text{O-2}} + \\ & \text{N(AWP)}_{\text{O-2}} + \text{N(AWN)}_{\text{O-2}} + \text{N(SUL)}_{\text{O-2}} + \\ & \text{N(SWL)}_{\text{O-2}} + \text{N(AWL)}_{\text{O-2}} + \text{N(NPL)}_{\text{O-2}}) \end{aligned}$$

$$\begin{aligned} \text{O-3 MPN Bud Amt for SEA}_{\text{O-3}} / & (\text{N(SUR)}_{\text{O-3}} + \text{N(SUB)}_{\text{O-3}} + \\ & \text{N(AWP)}_{\text{O-3}} + \text{N(AWN)}_{\text{O-3}} + \text{N(SUL)}_{\text{O-3}} + \\ & \text{N(SWL)}_{\text{O-3}} + \text{N(AWL)}_{\text{O-3}} + \text{N(NPL)}_{\text{O-3}}) \end{aligned}$$

$$\begin{aligned} \text{O-4 MPN Bud Amt for SEA}_{\text{O-4}} / & (\text{N(SUR)}_{\text{O-4}} + \text{N(SUB)}_{\text{O-4}} + \\ & \text{N(AWP)}_{\text{O-4}} + \text{N(AWN)}_{\text{O-4}} + \text{N(SUL)}_{\text{O-4}} + \\ & \text{N(SWL)}_{\text{O-4}} + \text{N(AWL)}_{\text{O-4}} + \text{N(NPL)}_{\text{O-4}}) \end{aligned}$$

S3. Premium Sea Pay - Paygrades O-1 through O-4

$$\begin{aligned} \text{MPN Bud Amt for PSEA} / & \{ \text{N(SUR)} + (\text{N(SUB)} - \text{N(SUB)}_{\text{FO}}) + \\ & \text{N(AWP)} + \text{N(AWN)} + \text{N(SUL)} + \text{N(SWL)} + \text{N(AWL)} + \\ & \text{N(NPL)} + \text{N(SUW)} + \text{N(SWW)} + \text{N(AWW)} + \text{N(NPW)} \} \end{aligned}$$



TABLE 42  
 AVIATION WARFARE SUBMODEL - WARRANT AVIATION (73XX)

S1. Career Sea Pay - Paygrades W-2 through W-4

W-2 MPN Bud Amt for  $SEA_{W-2} / (N(SUW)_{W-2} + N(SWW)_{W-2} + N(AWW)_{W-2} + N(NPW)_{W-2})$

W-3 MPN Bud Amt for  $SEA_{W-3} / (N(SUW)_{W-3} + N(SWW)_{W-3} + N(AWW)_{W-3} + N(NPW)_{W-3})$

W-4 MPN Bud Amt for  $SEA_{W-4} / (N(SUW)_{W-4} + N(SWW)_{W-4} + N(AWW)_{W-4} + N(NPW)_{W-4})$

S2. Premium Sea Pay - Paygrades W-2 through W-4

MPN Bud Amt for PSEA /  $\{N(SUR) + (N(SUB) - N(SUB)_{FO}) + N(AWP) + N(AWN) + N(SUL) + N(SWL) + N(AWL) + N(NPL) + N(SUW) + N(SWW) + N(AWW) + N(NPW)\}$

TABLE 43  
 AVIATION WARFARE SUBMODEL - WARRANT AVIATOR (7321)

S1. Flying Duty - Paygrades W-2 through W-4

a. ACIP

MPN Bud Amt for ACIP - WO /  $N(AWA)$

S2. Career Sea Pay - Paygrades W-2 through W-4

W-2 MPN Bud Amt for  $SEA_{W-2} / (N(SUW)_{W-2} + N(SWW)_{W-2} + N(AWW)_{W-2} + N(NPW)_{W-2})$

W-3 MPN Bud Amt for  $SEA_{W-3} / (N(SUW)_{W-3} + N(SWW)_{W-3} + N(AWW)_{W-3} + N(NPW)_{W-3})$

W-4 MPN Bud Amt for  $SEA_{W-4} / (N(SUW)_{W-4} + N(SWW)_{W-4} + N(AWW)_{W-4} + N(NPW)_{W-4})$

S3. Premium Sea Pay - Paygrades W-2 through W-4

MPN Bud Amt for PSEA /  $\{N(SUR) + (N(SUB) - N(SUB)_{FO}) + N(AWP) + N(AWN) + N(SUL) + N(SWL) + N(AWL) + N(NPL) + N(SUW) + N(SWW) + N(AWW) + N(NPW)\}$

TABLE 44  
SUBMARINE WARFARE SUBMODEL - URL (112X)

S1. Submarine Duty - Paygrades O-1 through O-10

- O-1  $130.00 * 12 = 1,560.00$
- O-2  $175.00 * 12 = 2,100.00$
- O-3  $((290.00 * 2/5) + (440.00 * 3/5)) * 12 = 4,560.00$
- O-4  $440.00 * 12 = 5,280.00$
- O-5  $440.00 * 12 = 5,280.00$
- O-6  $440.00 * 12 = 5,280.00$
- O-7  $((305.00 * 2/3) + (265.00 * 1/3)) * 12 = 3,500.00$
- O-8-10  $265.00 * 12 = 3,180.00$

S2. Nuclear Officer Incentive Pay - Paygrades O-1 through O-6  
and W-2 through W-4

$$\text{MPN Bud Amt for NOIP} / \{ (N(\text{SUB}) - N(\text{SUB})_{\text{FO}}) + N(\text{NPL}) + N(\text{NPW}) \}$$

S3. Career Sea Pay - Paygrades O-1 through O-6

- O-1  $\text{MPN Bud Amt for SEA}_{\text{O-1}} / (N(\text{SUR})_{\text{O-1}} + N(\text{SUB})_{\text{O-1}} + N(\text{AWP})_{\text{O-1}} + N(\text{AWN})_{\text{O-1}} + N(\text{SUL})_{\text{O-1}} + N(\text{SWL})_{\text{O-1}} + N(\text{AWL})_{\text{O-1}} + N(\text{NPL})_{\text{O-1}})$
- O-2  $\text{MPN Bud Amt for SEA}_{\text{O-2}} / (N(\text{SUR})_{\text{O-2}} + N(\text{SUB})_{\text{O-2}} + N(\text{AWP})_{\text{O-2}} + N(\text{AWN})_{\text{O-2}} + N(\text{SUL})_{\text{O-2}} + N(\text{SWL})_{\text{O-2}} + N(\text{AWL})_{\text{O-2}} + N(\text{NPL})_{\text{O-2}})$
- O-3  $\text{MPN Bud Amt for SEA}_{\text{O-3}} / (N(\text{SUR})_{\text{O-3}} + N(\text{SUB})_{\text{O-3}} + N(\text{AWP})_{\text{O-3}} + N(\text{AWN})_{\text{O-3}} + N(\text{SUL})_{\text{O-3}} + N(\text{SWL})_{\text{O-3}} + N(\text{AWL})_{\text{O-3}} + N(\text{NPL})_{\text{O-3}})$
- O-4  $\text{MPN Bud Amt for SEA}_{\text{O-4}} / (N(\text{SUR})_{\text{O-4}} + N(\text{SUB})_{\text{O-4}} + N(\text{AWP})_{\text{O-4}} + N(\text{AWN})_{\text{O-4}} + N(\text{SUL})_{\text{O-4}} + N(\text{SWL})_{\text{O-4}} + N(\text{AWL})_{\text{O-4}} + N(\text{NPL})_{\text{O-4}})$
- O-5  $\text{MPN Bud Amt for SEA}_{\text{O-5}} / (N(\text{SUR})_{\text{O-5}} + N(\text{SUB})_{\text{O-5}} + N(\text{AWP})_{\text{O-5}} + N(\text{AWN})_{\text{O-5}} + N(\text{SUL})_{\text{O-5}} + N(\text{SWL})_{\text{O-5}} + N(\text{AWL})_{\text{O-5}} + N(\text{NPL})_{\text{O-5}})$
- O-6  $\text{MPN Bud Amt for SEA}_{\text{O-6}} / (N(\text{SUR})_{\text{O-6}} + N(\text{SUB})_{\text{O-6}} + N(\text{AWP})_{\text{O-6}} + N(\text{AWN})_{\text{O-6}} + N(\text{SUL})_{\text{O-6}} + N(\text{SWL})_{\text{O-6}} + N(\text{AWL})_{\text{O-6}} + N(\text{NPL})_{\text{O-6}})$

S4. Premium Sea Pay - Paygrades O-1 through O-6

$$\text{MPN Bud Amt for PSEA} / \{ N(\text{SUR}) + (N(\text{SUB}) - N(\text{SUB})_{\text{FO}}) + N(\text{AWP}) + N(\text{AWN}) + N(\text{SUL}) + N(\text{SWL}) + N(\text{AWL}) + N(\text{NPL}) + N(\text{SUW}) + N(\text{SWW}) + N(\text{AWW}) + N(\text{NPW}) \}$$

S5. Responsibility Pay - Paygrades O-3 through O-6

$$\text{MPN Bud Amt for RP} / (N(\text{SUR})_{\text{O-3}} + N(\text{SUR})_{\text{O-4}} + N(\text{SUR})_{\text{O-5}} + N(\text{SUR})_{\text{O-6}} + N(\text{SUB})_{\text{O-3}} + N(\text{SUB})_{\text{O-4}} + N(\text{SUB})_{\text{O-5}} + N(\text{SUB})_{\text{O-6}})$$

TABLE 45  
SUBMARINE WARFARE SUBMODEL - TRAIN (117X)

S1. Submarine Duty - Paygrades O-1 through O-4

O-1 130.00 \* 12 = 1,560.00

O-2 175.00 \* 12 = 2,100.00

O-3 265.00 \* 12 = 3,180.00

O-4 270.00 \* 12 = 3,240.00

TABLE 46  
SUBMARINE WARFARE SUBMODEL - LDO (62XX)

S1. Submarine Duty - Paygrades O-1 through O-10

O-1	$130.00 * 12 = 1,560.00$
O-2	$175.00 * 12 = 2,100.00$
O-3	$((290.00 * 2/5) + (440.00 * 3/5)) * 12 = 4,560.00$
O-4	$440.00 * 12 = 5,280.00$
O-5	$440.00 * 12 = 5,280.00$
O-6	$440.00 * 12 = 5,280.00$
O-7	$((305.00 * 2/3) + (265.00 * 1/3)) * 12 = 3,500.00$
O-8-10	$265.00 * 12 = 3,180.00$

S2. Career Sea Pay - Paygrades O-1 through O-6

O-1	$MPN \text{ Bud Amt for SEA}_{O-1} / (N(SUR)_{O-1} + N(SUB)_{O-1} + N(AWP)_{O-1} + N(AWN)_{O-1} + N(SUL)_{O-1} + N(SWL)_{O-1} + N(AWL)_{O-1} + N(NPL)_{O-1})$
O-2	$MPN \text{ Bud Amt for SEA}_{O-2} / (N(SUR)_{O-2} + N(SUB)_{O-2} + N(AWP)_{O-2} + N(AWN)_{O-2} + N(SUL)_{O-2} + N(SWL)_{O-2} + N(AWL)_{O-2} + N(NPL)_{O-2})$
O-3	$MPN \text{ Bud Amt for SEA}_{O-3} / (N(SUR)_{O-3} + N(SUB)_{O-3} + N(AWP)_{O-3} + N(AWN)_{O-3} + N(SUL)_{O-3} + N(SWL)_{O-3} + N(AWL)_{O-3} + N(NPL)_{O-3})$
O-4	$MPN \text{ Bud Amt for SEA}_{O-4} / (N(SUR)_{O-4} + N(SUB)_{O-4} + N(AWP)_{O-4} + N(AWN)_{O-4} + N(SUL)_{O-4} + N(SWL)_{O-4} + N(AWL)_{O-4} + N(NPL)_{O-4})$
O-5	$MPN \text{ Bud Amt for SEA}_{O-5} / (N(SUR)_{O-5} + N(SUB)_{O-5} + N(AWP)_{O-5} + N(AWN)_{O-5} + N(SUL)_{O-5} + N(SWL)_{O-5} + N(AWL)_{O-5} + N(NPL)_{O-5})$
O-6	$MPN \text{ Bud Amt for SEA}_{O-6} / (N(SUR)_{O-6} + N(SUB)_{O-6} + N(AWP)_{O-6} + N(AWN)_{O-6} + N(SUL)_{O-6} + N(SWL)_{O-6} + N(AWL)_{O-6} + N(NPL)_{O-6})$

S3. Premium Sea Pay - Paygrades O-1 through O-6

$$MPN \text{ Bud Amt for PSEA} / \{N(SUR) + (N(SUB) - N(SUB)_{FO}) + N(AWP) + N(AWN) + N(SUL) + N(SWL) + N(AWL) + N(NPL) + N(SUW) + N(SWW) + N(AWW) + N(NPW)\}$$

TABLE 47  
SUBMARINE WARFARE SUBMODEL  
LDO NUCLEAR POWER (640X)

S1. Submarine Duty - Paygrades O-1 through O-10

$$\begin{aligned} \text{O-1 } & 130.00 * 12 = 1,560.00 \\ \text{O-2 } & 175.00 * 12 = 2,100.00 \\ \text{O-3 } & ((290.00 * 2/5) + (440.00 * 3/5)) * 12 = 4,560.00 \\ \text{O-4 } & 440.00 * 12 = 5,280.00 \\ \text{O-5 } & 440.00 * 12 = 5,280.00 \\ \text{O-6 } & 440.00 * 12 = 5,280.00 \\ \text{O-7 } & ((305.00 * 2/3) + (265.00 * 1/3)) * 12 = 3,500.00 \\ \text{O-8-10 } & 265.00 * 12 = 3,180.00 \end{aligned}$$

S2. Nuclear Officer Incentive Pay - Paygrades O-1 through O-6  
and W-2 through W-4

$$\text{MPN Bud Amt for NOIP} / \{ (N(\text{SUB}) - N(\text{SUB})_{\text{FO}}) + N(\text{NPL}) + N(\text{NPW}) \}$$

S3. Career Sea Pay - Paygrades O-1 through O-6

$$\begin{aligned} \text{O-1 } & \text{MPN Bud Amt for SEA}_{\text{O-1}} / (N(\text{SUR})_{\text{O-1}} + N(\text{SUB})_{\text{O-1}} + N(\text{AWP})_{\text{O-1}} + N(\text{AWN})_{\text{O-1}} + N(\text{SUL})_{\text{O-1}} + N(\text{SWL})_{\text{O-1}} + N(\text{AWL})_{\text{O-1}} + N(\text{NPL})_{\text{O-1}}) \\ \text{O-2 } & \text{MPN Bud Amt for SEA}_{\text{O-2}} / (N(\text{SUR})_{\text{O-2}} + N(\text{SUB})_{\text{O-2}} + N(\text{AWP})_{\text{O-2}} + N(\text{AWN})_{\text{O-2}} + N(\text{SUL})_{\text{O-2}} + N(\text{SWL})_{\text{O-2}} + N(\text{AWL})_{\text{O-2}} + N(\text{NPL})_{\text{O-2}}) \\ \text{O-3 } & \text{MPN Bud Amt for SEA}_{\text{O-3}} / (N(\text{SUR})_{\text{O-3}} + N(\text{SUB})_{\text{O-3}} + N(\text{AWP})_{\text{O-3}} + N(\text{AWN})_{\text{O-3}} + N(\text{SUL})_{\text{O-3}} + N(\text{SWL})_{\text{O-3}} + N(\text{AWL})_{\text{O-3}} + N(\text{NPL})_{\text{O-3}}) \\ \text{O-4 } & \text{MPN Bud Amt for SEA}_{\text{O-4}} / (N(\text{SUR})_{\text{O-4}} + N(\text{SUB})_{\text{O-4}} + N(\text{AWP})_{\text{O-4}} + N(\text{AWN})_{\text{O-4}} + N(\text{SUL})_{\text{O-4}} + N(\text{SWL})_{\text{O-4}} + N(\text{AWL})_{\text{O-4}} + N(\text{NPL})_{\text{O-4}}) \\ \text{O-5 } & \text{MPN Bud Amt for SEA}_{\text{O-5}} / (N(\text{SUR})_{\text{O-5}} + N(\text{SUB})_{\text{O-5}} + N(\text{AWP})_{\text{O-5}} + N(\text{AWN})_{\text{O-5}} + N(\text{SUL})_{\text{O-5}} + N(\text{SWL})_{\text{O-5}} + N(\text{AWL})_{\text{O-5}} + N(\text{NPL})_{\text{O-5}}) \\ \text{O-6 } & \text{MPN Bud Amt for SEA}_{\text{O-6}} / (N(\text{SUR})_{\text{O-6}} + N(\text{SUB})_{\text{O-6}} + N(\text{AWP})_{\text{O-6}} + N(\text{AWN})_{\text{O-6}} + N(\text{SUL})_{\text{O-6}} + N(\text{SWL})_{\text{O-6}} + N(\text{AWL})_{\text{O-6}} + N(\text{NPL})_{\text{O-6}}) \end{aligned}$$

S4. Premium Sea Pay - Paygrades O-1 through O-6

$$\begin{aligned} & \text{MPN Bud Amt for PSEA} / \{ N(\text{SUR}) + (N(\text{SUB}) - N(\text{SUB})_{\text{FO}}) + N(\text{AWP}) + N(\text{AWN}) + N(\text{SUL}) + N(\text{SWL}) + N(\text{AWL}) + N(\text{NPL}) + N(\text{SUW}) + N(\text{SWW}) + N(\text{AWW}) + N(\text{NPW}) \} \end{aligned}$$



TABLE 48  
SUBMARINE WARFARE SUBMODEL - WARRANT (72XX)

S1. Submarine Duty Pay - Paygrades W-2 through W-4

W-2  $265.00 * 12 = 3,180.00$

W-3  $265.00 * 12 = 3,180.00$

W-4  $265.00 * 12 = 3,180.00$

S2. Career Sea Pay - Paygrades W-2 through W-4

W-2  $\text{MPN Bud Amt for SEA}_{W-2} / (N(\text{SUW})_{W-2} + N(\text{SWW})_{W-2} + N(\text{AWW})_{W-2} + N(\text{NPW})_{W-2})$

W-3  $\text{MPN Bud Amt for SEA}_{W-3} / (N(\text{SUW})_{W-3} + N(\text{SWW})_{W-3} + N(\text{AWW})_{W-3} + N(\text{NPW})_{W-3})$

W-4  $\text{MPN Bud Amt for SEA}_{W-4} / (N(\text{SUW})_{W-4} + N(\text{SWW})_{W-4} + N(\text{AWW})_{W-4} + N(\text{NPW})_{W-4})$

S3. Premium Sea Pay - Paygrades W-2 through W-4

$\text{MPN Bud Amt for PSEA} / \{N(\text{SUR}) + (N(\text{SUB}) - N(\text{SUB})_{\text{FO}}) + N(\text{AWP}) + N(\text{AWN}) + N(\text{SUL}) + N(\text{SWL}) + N(\text{AWL}) + N(\text{NPL}) + N(\text{SUW}) + N(\text{SWW}) + N(\text{AWW}) + N(\text{NPW})\}$

TABLE 49  
SUBMARINE WARFARE SUBMODEL  
WARRANT NUCLEAR POWER (740X)

- S1. Nuclear Officer Incentive Pay - Paygrades O-1 through O-6  
and W-2 through W-4  
MPN Bud Amt for NOIP /  $\{(N(\text{SUB}) - N(\text{SUB})_{\text{FO}}) + N(\text{NPL}) + N(\text{NPW})\}$
- S2. Career Sea Pay - Paygrades W-2 through W-4  
W-2 MPN Bud Amt for SEA<sub>W-2</sub> /  $(N(\text{SUW})_{\text{W-2}} + N(\text{SWW})_{\text{W-2}} + N(\text{AWW})_{\text{W-2}} + N(\text{NPW})_{\text{W-2}})$   
W-3 MPN Bud Amt for SEA<sub>W-3</sub> /  $(N(\text{SUW})_{\text{W-3}} + N(\text{SWW})_{\text{W-3}} + N(\text{AWW})_{\text{W-3}} + N(\text{NPW})_{\text{W-3}})$   
W-4 MPN Bud Amt for SEA<sub>W-4</sub> /  $(N(\text{SUW})_{\text{W-4}} + N(\text{SWW})_{\text{W-4}} + N(\text{AWW})_{\text{W-4}} + N(\text{NPW})_{\text{W-4}})$
- S3. Premium Sea Pay - Paygrades W-2 through W-4  
MPN Bud Amt for PSEA /  $\{N(\text{SUR}) + (N(\text{SUB}) - N(\text{SUB})_{\text{FO}}) + N(\text{AWP}) + N(\text{AWN}) + N(\text{SUL}) + N(\text{SWL}) + N(\text{AWL}) + N(\text{NPL}) + N(\text{SUW}) + N(\text{SWW}) + N(\text{AWW}) + N(\text{NPW})\}$

TABLE 50  
SPECIAL WARFARE/OPERATIONS SUBMODEL - (113X)

- S1. Demolition Duty - Paygrades O-1 through O-6  
MPN Bud Amt for DEMD /  $(N(\text{SPW}) - N(\text{SPW})_{\text{FO}}) + (N(\text{SPO}) - N(\text{SPO})_{\text{FO}}) + N(\text{SPT})$
- S2. Diving Duty - Paygrades O-1 through O-6  
MPN Bud Amt for DIVD /  $(N(\text{SPW}) - N(\text{SPW})_{\text{FO}}) + (N(\text{SPO}) - N(\text{SPO})_{\text{FO}}) + N(\text{SPT})$
- S3. Parachute Jump - Paygrades O-1 through O-6  
MPN Bud Amt for PJ /  $(N(\text{SPW}) - N(\text{SPW})_{\text{FO}})$

TABLE 51  
SPECIAL WARFARE/OPERATIONS SUBMODEL - (114X)

- S1. Demolition Duty - Paygrades O-1 through O-6  
 MPN Bud Amt for DEMD /  $(N(\text{SPW}) - N(\text{SPW})_{\text{FO}}) + (N(\text{SPO}) - N(\text{SPO})_{\text{FO}}) + N(\text{SPT})$
- S2. Diving Duty - Paygrades O-1 through O-6  
 MPN Bud Amt for DIVD /  $(N(\text{SPW}) - N(\text{SPW})_{\text{FO}}) + (N(\text{SPO}) - N(\text{SPO})_{\text{FO}}) + N(\text{SPT})$

TABLE 52  
SPECIAL WARFARE/OPERATIONS SUBMODEL  
TRAIN (118X & 119X)

- S1. Demolition Duty - Paygrades O-1 through O-4  
 MPN Bud Amt for DEMD /  $(N(\text{SPW}) - N(\text{SPW})_{\text{FO}}) + (N(\text{SPO}) - N(\text{SPO})_{\text{FO}}) + N(\text{SPT})$
- S2. Diving Duty - Paygrades O-1 through O-4  
 MPN Bud Amt for DIVD /  $(N(\text{SPW}) - N(\text{SPW})_{\text{FO}}) + (N(\text{SPO}) - N(\text{SPO})_{\text{FO}}) + N(\text{SPT})$

TABLE 53  
MEDICAL CORPS SUBMODEL - (210X)

S1. Physicians Pay - Paygrades O-3 through O-9

a) Variable

Population	Rate
N(MC) <sub>O-3</sub>	$416.66 * 12 = 5,000.00$
N(MC) <sub>O-4</sub>	$((1/6 * 416.66) + (2/6 * 833.33) + (2/6 * 791.66) + (1/6 * 750.00)) * 12 = 8,833.00$
N(MC) <sub>O-5</sub>	$((1/6 * 750.00) + (2/6 * 666.66) + (3/6 * 583.33)) * 12 = 7,667.00$
N(MC) <sub>O-6</sub>	$((1/3 * 583.33) + (2/3 * 500.00)) * 12 = 6,333.00$
N(MC) <sub>O-7</sub>	$83.33 * 12 = 1,000.00$
N(MC) <sub>O-8-9</sub>	$83.33 * 12 = 1,000.00$

b) Additional

MPN Bud Amt for AP / N(MC)

c) Board Certified

MPN Bud Amt for BC / N(MC)

d) Medical Incentive

MPN Bud Amt for MI / (N(MC)<sub>O-3</sub> + N(MC)<sub>O-4</sub> + N(MC)<sub>O-5</sub> + N(MC)<sub>O-6</sub>)

TABLE 54  
DENTAL CORPS SUBMODEL - (220X)

S1. Dentists Pay - Paygrades O-3 through O-9

a) Variable

Population	Rate
N(DC) <sub>O-3</sub>	1,000.00
N(DC) <sub>O-4</sub>	$((1/6 * 1,000.00) + (4/6 * 4,000.00) + (1/6 * 6,000.00))$ = 3,833.00
N(DC) <sub>O-5</sub>	$((3/6 * 6,000.00) + (3/6 * 4,000.00)) = 5,000.00$
N(DC) <sub>O-6</sub>	$((1/3 * 4,000.00) + (2/3 * 3,000.00)) = 3,333.00$
N(DC) <sub>O-7</sub>	1,000.00
N(DC) <sub>O-8-9</sub>	1,000.00

b) Additional

Population	Rate
N(DC) <sub>O-3</sub>	$((3/5 * 0.00) + (2/5 * 6,000.00)) = 2,400.00$
N(DC) <sub>O-4</sub>	6,000.00
N(DC) <sub>O-5</sub>	$((3/6 * 6,000.00) + (3/6 * 8,000.00)) = 7,000.00$
N(DC) <sub>O-6</sub>	$((1/3 * 8,000.00) + 2/3 * 10,000.00)) = 9,334.00$
N(DC) <sub>O-7</sub>	10,000.00
N(DC) <sub>O-8-9</sub>	10,000.00

c) Board Certified

MPN Bud Amt for BC / N(DC)

d) Saved Pay

MPN Bud Amt for SVP / N(DC)

TABLE 55  
MEDICAL SERVICE CORPS SUBMODEL - (230X)

S1. Optometrist Pay - Paygrades O-3 through O-8

MPN Bud Amt for OP / N(MSC) - (N(MSC)<sub>O-1</sub> + N(MSC)<sub>O-2</sub>)



TABLE 56  
SURFACE WARFARE SUBMODEL - URL (111X)

S1. Responsibility Pay - Paygrades O-3 through O-6

$$\text{MPN Bud Amt for RP} / (\text{N(SUR)}_{\text{O-3}} + \text{N(SUR)}_{\text{O-4}} + \text{N(SUR)}_{\text{O-5}} + \text{N(SUR)}_{\text{O-6}} + \text{N(SUB)}_{\text{O-3}} + \text{N(SUB)}_{\text{O-4}} + \text{N(SUB)}_{\text{O-5}} + \text{N(SUB)}_{\text{O-6}})$$

S2. Flight Deck Duty Pay - Paygrades O-2 through O-4

$$\text{MPN Bud Amt for FDDP} / (\text{N(SUR)}_{\text{O-2}} + \text{N(SUR)}_{\text{O-3}} + \text{N(SUR)}_{\text{O-4}})$$

S3. Career Sea Pay - Paygrades O-1 through O-6

$$\text{O-1 MPN Bud Amt for SEA}_{\text{O-1}} / (\text{N(SUR)}_{\text{O-1}} + \text{N(SUB)}_{\text{O-1}} + \text{N(AWP)}_{\text{O-1}} + \text{N(AWN)}_{\text{O-1}} + \text{N(SUL)}_{\text{O-1}} + \text{N(SWL)}_{\text{O-1}} + \text{N(AWL)}_{\text{O-1}} + \text{N(NPL)}_{\text{O-1}})$$

$$\text{O-2 MPN Bud Amt for SEA}_{\text{O-2}} / (\text{N(SUR)}_{\text{O-2}} + \text{N(SUB)}_{\text{O-2}} + \text{N(AWP)}_{\text{O-2}} + \text{N(AWN)}_{\text{O-2}} + \text{N(SUL)}_{\text{O-2}} + \text{N(SWL)}_{\text{O-2}} + \text{N(AWL)}_{\text{O-2}} + \text{N(NPL)}_{\text{O-2}})$$

$$\text{O-3 MPN Bud Amt for SEA}_{\text{O-3}} / (\text{N(SUR)}_{\text{O-3}} + \text{N(SUB)}_{\text{O-3}} + \text{N(AWP)}_{\text{O-3}} + \text{N(AWN)}_{\text{O-3}} + \text{N(SUL)}_{\text{O-3}} + \text{N(SWL)}_{\text{O-3}} + \text{N(AWL)}_{\text{O-3}} + \text{N(NPL)}_{\text{O-3}})$$

$$\text{O-4 MPN Bud Amt for SEA}_{\text{O-4}} / (\text{N(SUR)}_{\text{O-4}} + \text{N(SUB)}_{\text{O-4}} + \text{N(AWP)}_{\text{O-4}} + \text{N(AWN)}_{\text{O-4}} + \text{N(SUL)}_{\text{O-4}} + \text{N(SWL)}_{\text{O-4}} + \text{N(AWL)}_{\text{O-4}} + \text{N(NPL)}_{\text{O-4}})$$

$$\text{O-5 MPN Bud Amt for SEA}_{\text{O-5}} / (\text{N(SUR)}_{\text{O-5}} + \text{N(SUB)}_{\text{O-5}} + \text{N(AWP)}_{\text{O-5}} + \text{N(AWN)}_{\text{O-5}} + \text{N(SUL)}_{\text{O-5}} + \text{N(SWL)}_{\text{O-5}} + \text{N(AWL)}_{\text{O-5}} + \text{N(NPL)}_{\text{O-5}})$$

$$\text{O-6 MPN Bud Amt for SEA}_{\text{O-6}} / (\text{N(SUR)}_{\text{O-6}} + \text{N(SUB)}_{\text{O-6}} + \text{N(AWP)}_{\text{O-6}} + \text{N(AWN)}_{\text{O-6}} + \text{N(SUL)}_{\text{O-6}} + \text{N(SWL)}_{\text{O-6}} + \text{N(AWL)}_{\text{O-6}} + \text{N(NPL)}_{\text{O-6}})$$

S4. Premium Sea Pay - Paygrades O-1 through O-6

$$\text{MPN Bud Amt for PSEA} / \{ \text{N(SUR)} + (\text{N(SUB)} - \text{N(SUB)}_{\text{FO}}) + \text{N(AWP)} + \text{N(AWN)} + \text{N(SUL)} + \text{N(SWL)} + \text{N(AWL)} + \text{N(NPL)} + \text{N(SUW)} + \text{N(SWW)} + \text{N(AWW)} + \text{N(NPW)} \}$$

TABLE 57  
SURFACE WARFARE SUBMODEL - LDO (61XX)

S1. Career Sea Pay - Paygrades O-1 through O-6

- O-1 MPN Bud Amt for SEA<sub>O-1</sub> / (N(SUR)<sub>O-1</sub> + N(SUB)<sub>O-1</sub> + N(AWP)<sub>O-1</sub> + N(AWN)<sub>O-1</sub> + N(SUL)<sub>O-1</sub> + N(SWL)<sub>O-1</sub> + N(AWL)<sub>O-1</sub> + N(NPL)<sub>O-1</sub>)
- O-2 MPN Bud Amt for SEA<sub>O-2</sub> / (N(SUR)<sub>O-2</sub> + N(SUB)<sub>O-2</sub> + N(AWP)<sub>O-2</sub> + N(AWN)<sub>O-2</sub> + N(SUL)<sub>O-2</sub> + N(SWL)<sub>O-2</sub> + N(AWL)<sub>O-2</sub> + N(NPL)<sub>O-2</sub>)
- O-3 MPN Bud Amt for SEA<sub>O-3</sub> / (N(SUR)<sub>O-3</sub> + N(SUB)<sub>O-3</sub> + N(AWP)<sub>O-3</sub> + N(AWN)<sub>O-3</sub> + N(SUL)<sub>O-3</sub> + N(SWL)<sub>O-3</sub> + N(AWL)<sub>O-3</sub> + N(NPL)<sub>O-3</sub>)
- O-4 MPN Bud Amt for SEA<sub>O-4</sub> / (N(SUR)<sub>O-4</sub> + N(SUB)<sub>O-4</sub> + N(AWP)<sub>O-4</sub> + N(AWN)<sub>O-4</sub> + N(SUL)<sub>O-4</sub> + N(SWL)<sub>O-4</sub> + N(AWL)<sub>O-4</sub> + N(NPL)<sub>O-4</sub>)
- O-5 MPN Bud Amt for SEA<sub>O-5</sub> / (N(SUR)<sub>O-5</sub> + N(SUB)<sub>O-5</sub> + N(AWP)<sub>O-5</sub> + N(AWN)<sub>O-5</sub> + N(SUL)<sub>O-5</sub> + N(SWL)<sub>O-5</sub> + N(AWL)<sub>O-5</sub> + N(NPL)<sub>O-5</sub>)
- O-6 MPN Bud Amt for SEA<sub>O-6</sub> / (N(SUR)<sub>O-6</sub> + N(SUB)<sub>O-6</sub> + N(AWP)<sub>O-6</sub> + N(AWN)<sub>O-6</sub> + N(SUL)<sub>O-6</sub> + N(SWL)<sub>O-6</sub> + N(AWL)<sub>O-6</sub> + N(NPL)<sub>O-6</sub>)

S2. Premium Sea Pay - Paygrades O-1 through O-6

MPN Bud Amt for PSEA / {N(SUR) + (N(SUB) - N(SUB)<sub>FO</sub>) + N(AWP) + N(AWN) + N(SUL) + N(SWL) + N(AWL) + N(NPL) + N(SUW) + N(SWW) + N(AWW) + N(NPW)}

TABLE 58  
SURFACE WARFARE SUBMODEL - WARRANT (71XX)

S1. Career Sea Pay - Paygrades W-2 through W-4

W-2 MPN Bud Amt for SEA<sub>W-2</sub> / (N(SUW)<sub>W-2</sub> + N(SWW)<sub>W-2</sub> + N(AWW)<sub>W-2</sub> + N(NPW)<sub>W-2</sub>)

W-3 MPN Bud Amt for SEA<sub>W-3</sub> / (N(SUW)<sub>W-3</sub> + N(SWW)<sub>W-3</sub> + N(AWW)<sub>W-3</sub> + N(NPW)<sub>W-3</sub>)

W-4 MPN Bud Amt for SEA<sub>W-4</sub> / (N(SUW)<sub>W-4</sub> + N(SWW)<sub>W-4</sub> + N(AWW)<sub>W-4</sub> + N(NPW)<sub>W-4</sub>)

S2. Premium Sea Pay - Paygrades W-2 through W-4

MPN Bud Amt for PSEA / {N(SUR) + (N(SUB) - N(SUB)<sub>FO</sub>) + N(AWP) + N(AWN) + N(SUL) + N(SWL) + N(AWL) + N(NPL) + N(SUW) + N(SWW) + N(AWW) + N(NPW)}

## APPENDIX B

### ABBREVIATIONS AND ACRONYMS

ACIP	Aviation Career Incentive Pay
ADM	Admiral
AOCP	Aviation Officer Career Pay
AP	Additional Pay
AT <sub>O</sub>	Accession Travel - Officers
BAQ	Basic Allowance for Quarters
BAS	Basic Allowance for Subsistence
BP	Basic Pay
BP Ave Rate	Average Basic Pay Rate
BC	Board Certified
CAPT	Captain
CDR	Commander
CY	Calendar Year
CY % Rate	Calendar Year Percentage Rate
DEMD	Demolition Duty
Dep BAQ Rate	BAQ Rate With Dependents
DIVD	Diving Duty
DG	Death Gratuities
DOD	Department of Defense
EB	Educational Benefits
ENS	Ensign
EXP	Experimental Pay
Experimental	Duty Inside a High or Low Pressure Chamber, Inside Observer, Human Acceleration or Deceleration Experimental Observer and Test Subjects in Thermal Stress Experiments
FDDP	Flight Deck Duty Pay
FLPP	Foreign Language Proficiency Pay
FO	Flag Officers - Paygrades O-7 through O-10
FSA	Family Separation Allowance
FY	Fiscal Year
IDP	Imminent Danger Pay
LCDR	Lieutenant Commander
LDO	Limited Duty Officer
LT	Lieutenant
LTJG	Lieutenant Junior Grade
LSP-R	Lump Sum Payment to Reservists
LSTL	Lump Sum Terminal Leave
MI	Medical Incentive
MPN	Military Personnel, Navy
MPN Bud Amt	Military Personnel, Navy Budgeted Amount

N	Officer Population - Workyears Experienced
N E	Enlisted Population - Workyears Experienced
N FO	Flag Officer Population
N O-1	O-1 Officer Population
N O-2	O-2 Officer Population
N O-3	O-3 Officer Population
N O-4	O-4 Officer Population
N O-5	O-5 Officer Population
N O-6	O-6 Officer Population
N O-7	O-7 Officer Population
N O-8	O-8 Officer Population
N O-9	O-9 Officer Population
N O-10	O-10 Officer Population
N W-2	W-2 Officer Population
N W-3	W-3 Officer Population
N W-4	W-4 Officer Population
N(AWA)	Aviation Warfare Population - Warrant Aviator
N(AWA)W-2	W-2 Aviation Warfare Population - Warrant Aviator
N(AWA)W-3	W-3 Aviation Warfare Population - Warrant Aviator
N(AWA)W-4	W-4 Aviation Warfare Population - Warrant Aviator
N(AWL)	Aviation Warfare Population - LDO - Paygrades O-1 through O-6
N(AWL)O-1	O-1 Aviation Warfare Population - LDO
N(AWL)O-2	O-2 Aviation Warfare Population - LDO
N(AWL)O-3	O-3 Aviation Warfare Population - LDO
N(AWL)O-4	O-4 Aviation Warfare Population - LDO
N(AWL)O-5	O-5 Aviation Warfare Population - LDO
N(AWL)O-6	O-6 Aviation Warfare Population - LDO
N(AWN)	Aviation Warfare Population - NFO
N(AWN)O-1	O-1 Aviation Warfare Population - NFO
N(AWN)O-2	O-2 Aviation Warfare Population - NFO
N(AWN)O-3	O-3 Aviation Warfare Population - NFO
N(AWN)O-4	O-4 Aviation Warfare Population - NFO
N(AWN)O-5	O-5 Aviation Warfare Population - NFO
N(AWN)O-6	O-6 Aviation Warfare Population - NFO
N(AWP)	Aviation Warfare Population - Pilot
N(AWP)O-1	O-1 Aviation Warfare Population - Pilot
N(AWP)O-2	O-2 Aviation Warfare Population - Pilot
N(AWP)O-3	O-3 Aviation Warfare Population - Pilot
N(AWP)O-4	O-4 Aviation Warfare Population - Pilot
N(AWP)O-5	O-5 Aviation Warfare Population - Pilot
N(AWP)O-6	O-6 Aviation Warfare Population - Pilot
N(AWW)	Aviation Warfare Population - Warrant
N(AWW)W-2	W-2 Aviation Warfare Population - Warrant
N(AWW)W-3	W-3 Aviation Warfare Population - Warrant
N(AWW)W-4	W-4 Aviation Warfare Population - Warrant
N(DC)	Dental Corps Population
N(DC)O-3	O-3 Dental Corps Population



N(DC)O-4	O-4 Dental Corps Population
N(DC)O-5	O-5 Dental Corps Population
N(DC)O-6	O-6 Dental Corps Population
N(DC)O-7	O-7 Dental Corps Population
N(DC)O-8-9	O-8-9 Dental Corps Population
N(MC)	Medical Corps Population
N(MC)O-3	O-3 Medical Corps Population
N(MC)O-4	O-4 Medical Corps Population
N(MC)O-5	O-5 Medical Corps Population
N(MC)O-6	O-6 Medical Corps Population
N(MC)O-7	O-7 Medical Corps Population
N(MC)O-8-9	O-8-9 Medical Corps Population
N(MSC)	Medical Service Corps Population
N(MSC)O-1	O-1 Medical Service Corps Population
N(MSC)O-2	O-2 Medical Service Corps Population
N(NPL)	Submarine Warfare Population - LDO Nuclear Power Paygrades O-1 through O-6
N(NPL)O-1	O-1 Submarine Warfare Population - LDO Nuclear Power
N(NPL)O-2	O-2 Submarine Warfare Population - LDO Nuclear Power
N(NPL)O-3	O-3 Submarine Warfare Population - LDO Nuclear Power
N(NPL)O-4	O-4 Submarine Warfare Population - LDO Nuclear Power
N(NPL)O-5	O-5 Submarine Warfare Population - LDO Nuclear Power
N(NPL)O-6	O-6 Submarine Warfare Population - LDO Nuclear Power
N(NPW)	Submarine Warfare Population - Warrant Nuclear Power
N(NPW)W-2	W-2 Submarine Warfare Population - Warrant Nuclear Power
N(NPW)W-3	W-3 Submarine Warfare Population - Warrant Nuclear Power
N(NPW)W-4	W-4 Submarine Warfare Population - Warrant Nuclear Power
N(SPO)	Special Operations Population - Designator 114X
N(SPO)FO	Flag Officer Special Operations Population
N(SPT)	Special Warfare/Operations Training Population - Designators 118X
N(SPT)O-1	O-1 Special Warfare/Operations Training Population
N(SPT)O-2	O-2 Special Warfare/Operations Training Population
N(SPT)O-3	O-3 Special Warfare/Operations Training Population
N(SPT)O-4	O-4 Special Warfare/Operations Training Population
N(SPW)	Special Warfare Population - Designator 113X
N(SPW)FO	Flag Officer Special Warfare Population
N(SUB)	Submarine Warfare Population
N(SUB)O-1	O-1 Submarine Warfare Population
N(SUB)O-2	O-2 Submarine Warfare Population
N(SUB)O-3	O-3 Submarine Warfare Population
N(SUB)O-4	O-4 Submarine Warfare Population
N(SUB)O-5	O-5 Submarine Warfare Population
N(SUB)O-6	O-6 Submarine Warfare Population
N(SUB)FO	Flag Officer Submarine Warfare Population
N(SUL)	Surface Warfare Population - LDO
N(SUL)O-1	O-1 Surface Warfare Population - LDO
N(SUL)O-2	O-2 Surface Warfare Population - LDO

N(SUL)O-3	O-3 Surface Warfare Population - LDO
N(SUL)O-4	O-4 Surface Warfare Population - LDO
N(SUL)O-5	O-5 Surface Warfare Population - LDO
N(SUL)O-6	O-6 Surface Warfare Population - LDO
N(SUR)	Surface Warfare Population - Paygrades O-1 through O-6
N(SUR)O-1	O-1 Surface Warfare Population
N(SUR)O-2	O-2 Surface Warfare Population
N(SUR)O-3	O-3 Surface Warfare Population
N(SUR)O-4	O-4 Surface Warfare Population
N(SUR)O-5	O-5 Surface Warfare Population
N(SUR)O-6	O-6 Surface Warfare Population
N(SUW)	Surface Warfare Population - Warrant
N(SUW)W-2	W-2 Surface Warfare Population - Warrant
N(SUW)W-3	W-3 Surface Warfare Population - Warrant
N(SUW)W-4	W-4 Surface Warfare Population - Warrant
N(SWL)	Submarine Warfare Population - LDO - Paygrades O-1 through O-6
N(SWL)O-1	O-1 Submarine Warfare Population - LDO
N(SWL)O-2	O-2 Submarine Warfare Population - LDO
N(SWL)O-3	O-3 Submarine Warfare Population - LDO
N(SWL)O-4	O-4 Submarine Warfare Population - LDO
N(SWL)O-5	O-5 Submarine Warfare Population - LDO
N(SWL)O-6	O-6 Submarine Warfare Population - LDO
N(SWW)	Submarine Warfare Population - Warrant Nuclear Power
N(SWW)W-2	W-2 Submarine Warfare Population - Warrant Nuclear Power
N(SWW)W-3	W-3 Submarine Warfare Population - Warrant Nuclear Power
N(SWW)W-4	W-4 Submarine Warfare Population - Warrant Nuclear Power
NC	Non-Crew
NFO	Naval Flight Officer
NMPC	Navy Military Personnel Command
NOIP	Nuclear Officer Incentive Pay
NTS	Non-Temporary Storage
OBCM	Officer Billet Cost Model
OIC	Other Indirect Costs
OP	Optometrist Pay
OT <sub>O</sub>	Operational Travel - Officers
PA Rate	Partial Allowance - Bachelor BAQ Rate
PJ	Parachute Jump
PMA	Personal Money Allowance
PSEA	Premium Sea Pay
RADM(L)	Rear Admiral (Lower Half)
RADM(U)	Rear Admiral (Upper Half)
RP	Responsibility Pay
RPA	Retired Pay Accrual
RT <sub>O</sub>	Rotational Travel - Officers
SAO	Station Allowance, Overseas
SB	Survivor's Benefits
SEA <sub>O-1</sub>	O-1 Career Sea Pay

SEA <sub>O-2</sub>	O-2 Career Sea Pay
SEA <sub>O-3</sub>	O-3 Career Sea Pay
SEA <sub>O-4</sub>	O-4 Career Sea Pay
SEA <sub>O-5</sub>	O-5 Career Sea Pay
SEA <sub>O-6</sub>	O-6 Career Sea Pay
SEA <sub>W-2</sub>	W-2 Career Sea Pay
SEA <sub>W-3</sub>	W-3 Career Sea Pay
SEA <sub>W-4</sub>	W-4 Career Sea Pay
SFH Rate	Substandard Family Housing BAQ Rate
SP	Separation Payments
SP-D	Severance Pay - Disability
SST	Social Security Tax - Employer's Contribution
ST <sub>O</sub>	Separation Travel - Officers
SVP	Saved Pay
TLE	Temporary Lodging Expense
TMP	Toxic Material Pay
TOU <sub>O</sub>	Travel of Organized Units - Officers
TT <sub>O</sub>	Training Travel - Officers
UA	Uniform Allowance
URL	Unrestricted Line
VADM	Vice Admiral
VHA	Variable Housing Allowance
VHA Ave Rate	Average Variable Housing Allowance Rate
W/O Dep BAQ Rate	BAQ Rate Without Dependents
WO	Warrant Officer

## APPENDIX C

### OFFICER BILLET COST MODEL/SUBMODEL COMPONENTS

#### 1. OFFICER BILLET COST MODEL EQUATION COMPONENTS, THEIR DEFINITION AND SOURCE

##### a. BP Ave Rate

BP Ave Rate is the average basic pay rate experienced, for a paygrade, during a given fiscal year. This rate is calculated by summing the actual basic pay paid for a paygrade and dividing the total by the number of workyears experienced by that paygrade. The rates used in the Officer Billet Cost Model (OBCM) are found in [Ref. 1: p. 21].

##### b. CY % Rate

Calendar year (CY) percentage rate is a rate applied to the average basic pay rate to calculate the Navy's portion of the social security tax (SST) as an employer. The calendar year percentage rate is determined by law on a calendar year basis. The calendar year percentage rate used in the OBCM is the rate that corresponds with the fiscal year under consideration. The CY percentage rate used for FY86 is the CY86 rate or 7.15% on the first \$42,000 of average basic pay earned. [Ref. 1: p. 40]

##### c. Dep BAQ Rate

Dep BAQ Rate is the BAQ rate with dependents. This rate is set by statute. These rates and number of officers eligible by paygrade are found in [Ref. 1: p. 30].

##### d. LSTL Rate

LSTL Rate is the Lump Sum Terminal Leave (LSTL) payment rate found in the SP component of the Military Personnel, Navy (MPN) account. The LSTL rate used in calculating SP is found in [Ref. 1: p. 38].

##### e. MPN Bud Amt for $AT_O$

The MPN Bud Amt for  $AT_O$  is the total MPN budgeted amount for Accession Travel, for officers. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 83].

##### f. MPN Bud Amt for DG

MPN Bud Amt for DG is the MPN budgeted amount for Death Gratuities. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 96].



g. **MPN Bud Amt for EB**

MPN Bud Amt for EB is the MPN budgeted amount for Educational Benefits. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 99].

h. **MPN Bud Amt for EXP**

The MPN Bud Amt for EXP is the total MPN budgeted amount for Duty Inside a High or Low Pressure Chamber, Inside Observer, Human Acceleration or Deceleration Experimental Observer and Test Subjects in Thermal Stress Experiments. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 25].

i. **MPN Bud Amt for FLPP**

MPN Bud Amt for FLPP is the MPN budgeted amount for Foreign Language Proficiency Pay (FLPP). The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].

j. **MPN Bud Amt for FOP-SP**

MPN Bud Amt for FOP-SP is the MPN budgeted amount for Severance Pay, Failure of Promotion found in the SP component of the MPN account. The total budgeted amount used in calculating SP in the OBCM is found in [Ref. 1: p. 39].

k. **MPN Bud Amt for FSA**

The MPN Bud Amt for FSA is the total MPN budgeted amount for Family Separation Allowances (FSA). The total budgeted amount used in the OBCM is found in [Ref. 1: p. 37].

l. **MPN Bud Amt for IDP**

MPN Bud Amt for IDP is the MPN budgeted amount for Imminent Danger Pay (IDP). The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].

m. **MPN Bud Amt for LSP-R**

MPN Bud Amt for LSP-R is the MPN budgeted amount for Lump Sum Payments to Reservists (LSP-R) found in the SP component of the MPN account. The total budgeted amount used in calculating SP in the OBCM is found in [Ref. 1: p. 39].

n. **MPN Bud Amt for NTS**

The MPN Bud Amt for NTS is the total MPN budgeted amount for Non-Temporary Storage. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 93].



**o. MPN Bud Amt for OT<sub>O</sub>**

The MPN Bud Amt for OT<sub>O</sub> is the total MPN budgeted amount for Operational Travel, for officers. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 87].

**p. MPN Bud Amt for PMA**

MPN Bud Amt for PMA is the MPN budgeted amount for Personal Money Allowance (PMA). The total budgeted amount used in the OBCM is found in [Ref. 1: p. 28].

**q. MPN Bud Amt for RT<sub>O</sub>**

The MPN Bud Amt for RT<sub>O</sub> is the total MPN budgeted amount for Rotational Travel, for officers. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 89].

**r. MPN Bud Amt for SAO**

The MPN Bud Amt for SAO is the total Manpower Personnel, Navy (MPN) budgeted amount for Station Allowances, Overseas (SAO). The total budgeted amount used in the OBCM is found in [Ref. 1: p. 34].

**s. MPN Bud Amt for SB**

MPN Bud Amt for SB is the MPN budgeted amount for Survivor's Benefits. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 98].

**t. MPN Bud Amt for SP-D**

The MPN Bud Amt for SP-D is the total MPN budgeted amount for Severance Pay, Disability. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 39].

**u. MPN Bud Amt for ST<sub>O</sub>**

The MPN Bud Amt for ST<sub>O</sub> is the total MPN budgeted amount for Separation Travel, for officers. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 91].

**v. MPN Bud Amt for TLE**

The MPN Bud Amt for TLE is the total MPN budgeted amount for Temporary Lodging Expense. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 93].

**w. MPN Bud Amt for TMP**

MPN Bud Amt for TMP is the MPN budgeted amount for Toxic Material Pay (TMP). The total budgeted amount used in the OBCM is found in [Ref. 1: p. 25].

x. **MPN Bud Amt for TOU<sub>O</sub>**

The MPN Bud Amt for TOU<sub>O</sub> is the total MPN budgeted amount for Travel of Organized Units, for officers. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 93].

y. **MPN Bud Amt for TT<sub>O</sub>**

The MPN Bud Amt for TT<sub>O</sub> is the total MPN budgeted amount for Training Travel, for officers. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 85].

z. **MPN Bud Amt for UA**

The MPN Bud Amt for UA is the total MPN budgeted amount for Uniform Allowances (UA). The total budgeted amount used in the OBCM is found in [Ref. 1: p. 35].

aa. **Normal Cost %**

Normal cost percentage is a rate applied to the average basic pay rate to calculate retired pay accrual (RPA). The normal cost percentage is determined by law on a FY basis. The normal cost percentage for FY86 is 50.7% of basic pay earned from October through July, and 42.0% of basic pay earned in August and September as found in [Ref. 1: p. 22].

ab. **PA Rate**

PA Rate is the BAQ rate for partial allowance - bachelors. This rate is set by statute. These rates and number of officers eligible by paygrade are found in [Ref. 1: p. 31].

ac. **SFH Rate**

SFH Rate is the BAQ rate for substandard family housing. These rates are set by statute. These rates and number of officers eligible by paygrade are found in [Ref. 1: p. 31].

ad. **VHA Ave Rate**

VHA Ave Rate is the average variable housing allowance (VHA) rate experienced during a given fiscal year. This rate is calculated by summing the actual VHA paid for a paygrade and dividing the total by the number of workyears experienced based on the number of eligible officers for that paygrade. The rates used in the OBCM are found in [Ref. 1: p. 32].

**ae. W/O Dep BAQ Rate**

W/O Dep BAQ Rate is the BAQ rate without dependents. This rate is set by statute. These rates and number of officers eligible by paygrade are found in [Ref. 1: p. 31].

**2. AVIATION WARFARE SUBMODELS EQUATION COMPONENTS, THEIR DEFINITION AND SOURCE**

**a. MPN Bud Amt for AOCP - NFOs**

The MPN Bud Amt for AOCP - NFOs is the total MPN budgeted amount for Continuation Pay - NFOs. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 24].

**b. MPN Bud Amt for AOCP - Pilots**

The MPN Bud Amt for AOCP - Pilots is the total MPN budgeted amount for Continuation Pay - Pilots. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 24].

**c. MPN Bud Amt for NC**

The MPN Bud Amt for NC is the total MPN budgeted amount for Non-Crew. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 24].

**d. MPN Bud Amt for PSEA**

The MPN Bud Amt for PSEA is the total MPN budgeted amount for Premium Sea Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].

**e. MPN Bud Amt for SEA<sub>O-1-6</sub>**

The MPN Bud Amt for SEA<sub>O-1-6</sub> is the individual MPN budgeted amounts for Career Sea Pay, paygrades O-1 through O-6. The individual budgeted amounts used in the OBCM are found in [Ref. 1: p. 29].

**3. SUBMARINE WARFARE SUBMODELS EQUATION COMPONENTS, THEIR DEFINITION AND SOURCE**

**a. MPN Bud Amt for NOIP**

The MPN Bud Amt for NOIP is the total MPN budgeted amount for Nuclear Officer Incentive Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].

**b. MPN Bud Amt for PSEA**

The MPN Bud Amt for PSEA is the total MPN budgeted amount for Premium Sea Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].

**c. MPN Bud Amt for RP**

The MPN Bud Amt for RP is the total MPN budgeted amount for Responsibility Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].

**d. MPN Bud Amt for SEA<sub>O-1-6</sub>**

The MPN Bud Amt for SEA<sub>O-1-6</sub> is the individual MPN budgeted amounts for Career Sea Pay, paygrades O-1 through O-6. The individual budgeted amounts used in the OBCM are found in [Ref. 1: p. 29].

**4. SPECIAL WARFARE/OPERATIONS SUBMODELS EQUATION COMPONENTS, THEIR DEFINITION AND SOURCE**

**a. MPN Bud Amt for DEMD**

The MPN Bud Amt for DEMD is the total MPN budgeted amount for Demolition Duty. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 25].

**b. MPN Bud Amt for DIVD**

The MPN Bud Amt for DIVD is the total MPN budgeted amount for Diving Duty. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].

**c. MPN Bud Amt for PJ**

The MPN Bud Amt for PJ is the total MPN budgeted amount for Parachute Jumping. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 25].

**5. MEDICAL CORPS SUBMODEL EQUATION COMPONENTS, THEIR DEFINITION AND SOURCE**

**a. MPN Bud Amt for AP**

The MPN Bud Amt for AP is the total MPN budgeted amount for Additional Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 28].



b. **MPN Bud Amt for BC**

The MPN Bud Amt for BC is the total MPN budgeted amount for Board Certified - Physicians. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 28].

c. **MPN Bud Amt for MI**

The MPN budgeted amount for MI is the total MPN budgeted amount for Medical Incentive. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 28].

6. **DENTAL CORPS SUBMODEL EQUATION COMPONENTS, THEIR DEFINITION AND SOURCE**

a. **MPN Bud Amt for BC**

The MPN Bud Amt for BC is the total MPN budgeted amount for Board Certified - Dentists. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 28].

b. **MPN Bud Amt for SVP**

The MPN Bud Amt for SVP is the total MPN budgeted amount for Saved Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 28].

7. **MEDICAL SERVICE CORPS SUBMODEL EQUATION COMPONENTS, THEIR DEFINITION AND SOURCE**

a. **MPN Bud Amt for OP**

The MPN Bud Amt for OP is the total MPN budgeted amount for Optometrist's Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 28].

8. **SURFACE WARFARE SUBMODELS EQUATION COMPONENTS, THEIR DEFINITION AND SOURCE**

a. **MPN Bud Amt for FDDP**

The MPN Bud Amt for FDDP is the total MPN budgeted amount for Flight Deck Duty Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 25].

b. **MPN Bud Amt for PSEA**

The MPN Bud Amt for PSEA is the total MPN budgeted amount for Premium Sea Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].



c. **MPN Bud Amt for RP**

The MPN Bud Amt for RP is the total MPN budgeted amount for Responsibility Pay. The total budgeted amount used in the OBCM is found in [Ref. 1: p. 29].

d. **MPN Bud Amt for SEA<sub>O-1-6</sub>**

The MPN Bud Amt for SEA<sub>O-1-6</sub> is the individual MPN budgeted amounts for Career Sea Pay, paygrades O-1 through O-6. The individual budgeted amounts used in the OBCM are found in [Ref. 1: p. 29].

## LIST OF REFERENCES

1. Naval Military Personnel Command, NMPC-7, *Department of the Navy Justification of Estimates*, Navy Department, Washington, D. C., January 1987.
2. Pilling, D. L., CAPT, USN, *The Dwindling Muster*, Proceedings, Volume 108, 6, 952, June 1982.
3. Navy Military Personnel Command, NMPC-1654H, *FY-86 Annual Report Navy Military Personnel Statistics*, Navy Department, Washington, D. C., 30 September 1986.
4. Demsko, H., interview, Navy Military Personnel Command, NMPC-1654H, Washington, D. C., 05 November 1987.
5. Naval Military Personnel Command, NMPC-16, *MAPMIS Report 53140466*, Navy Department, Washington, D. C., 30 September 1986.
6. Osterhoudt, R. R., CDR, USN, interview, Office of the Chief of Naval Operations, OP-801B, Washington, D. C., 20 July 1987.
7. Osterhoudt, R. R., CDR, USN, *A Naval Officer as an Asset*, Master's Thesis, Naval Postgraduate School, Monterey, California, December 1983.
8. *Defense Officer Personnel Management Act*, Public Law No. 96-513, 94 Stat. 2835, 1980.
9. *U. S. Navy Pay Chart*, E. O. 12578, Prepared by NAFC-4, Effective 01 October 1985.
10. Secretary of the Navy, SECNAVINST 7220.79, NMPC-432t/Pers-432t, Subject: *Aviation Officer Continuation Pay (AOCP)*, 10 August 1981.
11. Secretary of the Navy, SECNAVINST 7220.65F, OP-131, Subject: *Nuclear Officer Incentive Pay*, 10 March 1987.

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